# Technical Tips : 3DQuickPress in SOLIDWORKS(TM)

By Ronnie Flaugh
STS / CATI

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October 12, 2012

**(Extracted from CATI Blog at http://blog.cati.com/solidworks/)**

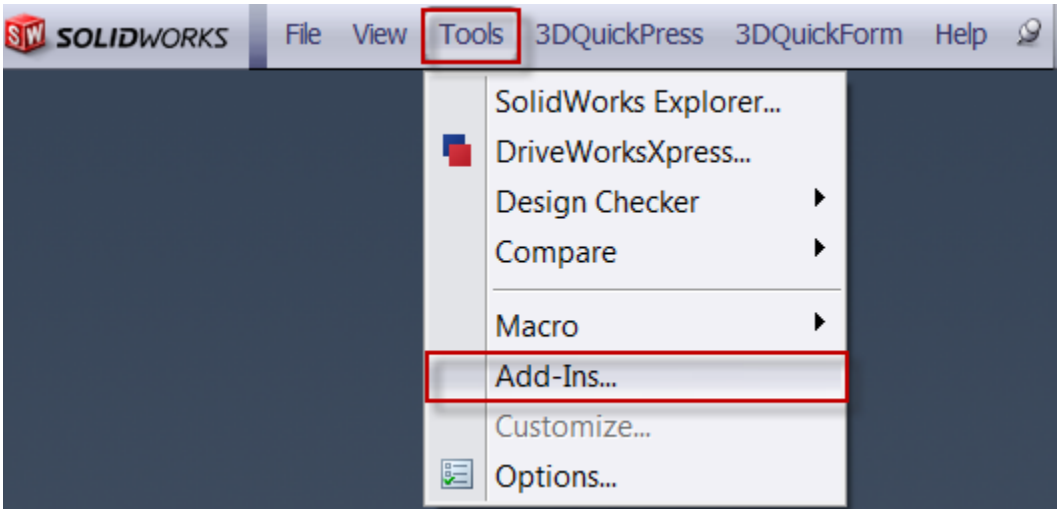
# How to set 3DQPress Command Tabs in SolidWorks

Welcome to 3DQPress “how to setup”. The following blog will walk the new as well as current customers "How To" set up the SolidWorks Command Manager with 3DQPress Tabs. This blog is broke out in 2 sections, New Instalation and Update Instalation for ease of use.

## New Installation

1. Start SolidWorks.

2. Select the **Tools\Add-Ins**of SolidWorks.




3. At the bottom of the SolidWorks Add-Ins manager you will find the 3DQTools software that you have loaded, **check both boxes** so the software will auto-load when starting your next session of SolidWorks.

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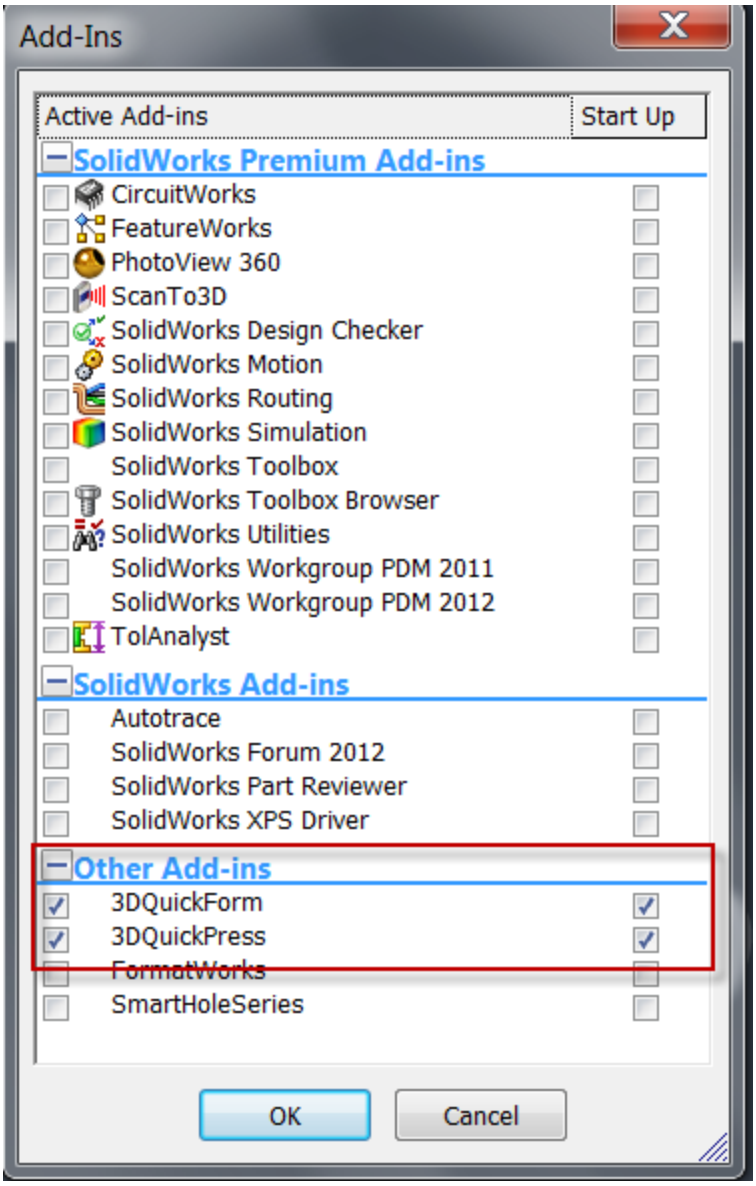


4. Close the Add-Ins manager.

5. 3DQPress will prompt “Do you have a Hardware Dongle”

a. **“No”** means you are running a **TEMP code**, continue by copy and paste the temp registration code that was sent to you by 3DQPress representative.

b. **“Yes”** means you **have receive your hardware dongle**, continue by plugging the dongle into one of your USB port, wait for the hardware to acknowledge the new dongle and download the driver software if needed. Copy and paste the serial number then select **UPDATE tab**, continue by copy and paste the registration code then select **UPDATE tab**, then close.

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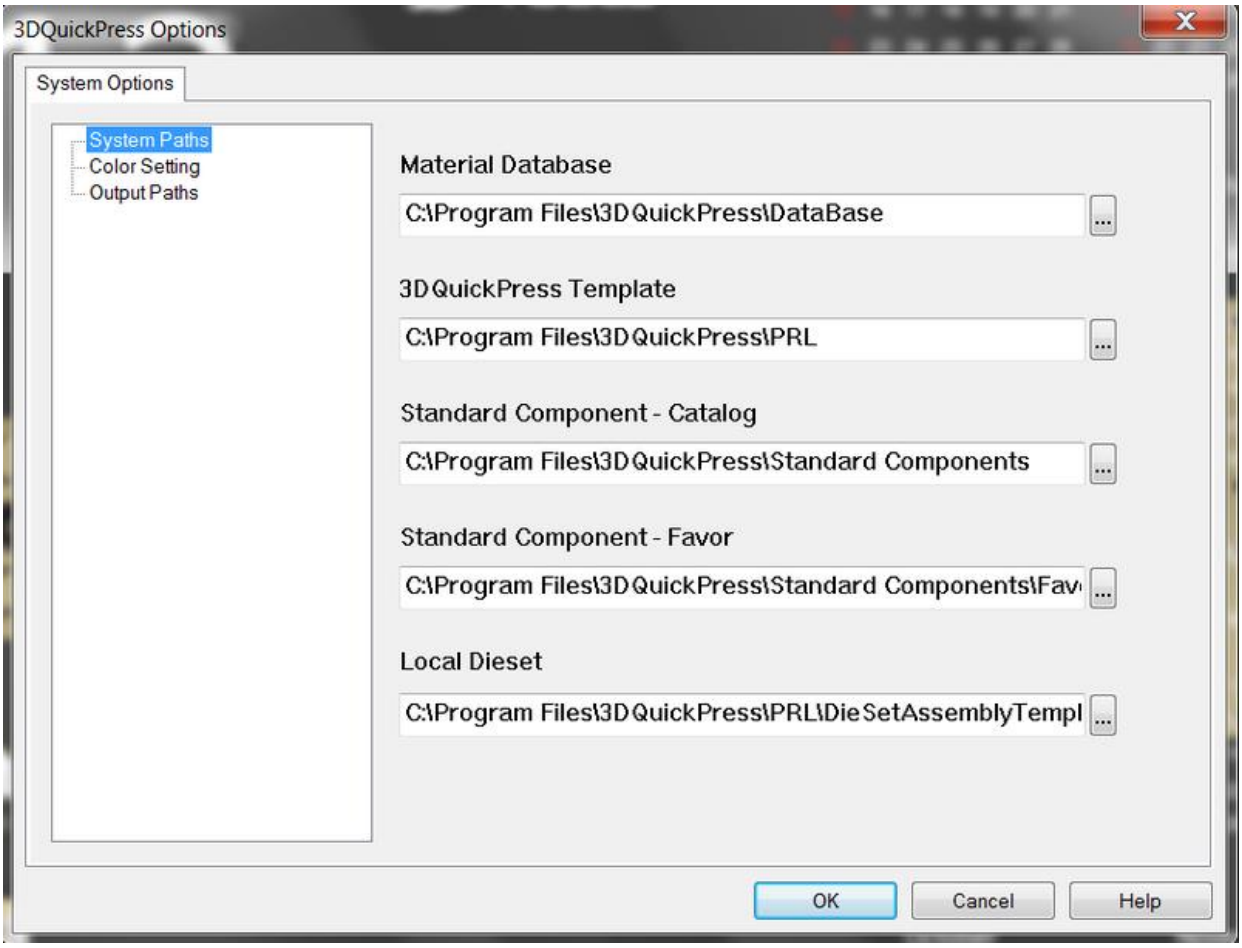
6. Once the software has loaded and the registry is complete you will see the **3DQPress Options** menu, this shows the paths to the currently loaded files.




7. After selecting **OK** to complete the Add-Ins loading, the 3DQTools software has will be displayed in the SolidWorks top ribbon.


8. Close SolidWorks to find the Commands Manager Registry tab on your **desktop**.

9. **Double click** on "3DQP ComTabs.reg" and say **"Yes"** when asked to update the command manager tabs. **Note:** If a "3DQP ComTabs.reg" is not on your desk top skip to #12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10. **Delete** the “3DQP ComTabs.reg” Part and Assembly files from your desktop then start SolidWorks again, **after opening a Part or Assembly file** you will see the new 3DQPress Commands Manager Tabs.

11. If, when loading the software you are prompt **“Unable to register the DLL/OCX: RegSvr32 failed with exit code 0x3”** Windows denied the registration of 3DQP.

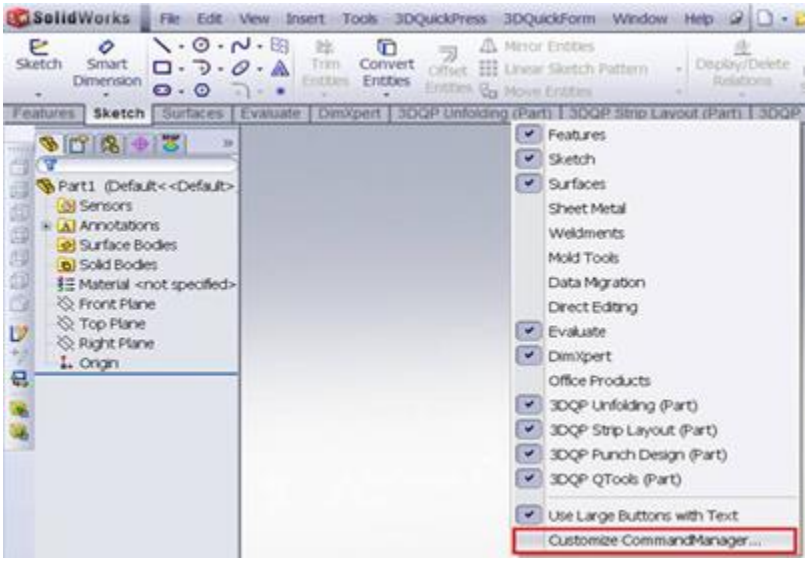
12. Contact your 3DQPress representative at 920.268.1721 or email Ronf@callsts.com .

## Update Installation

1. Start SolidWorks.

2. **Start** a new Part file.

3. **Right click** on Command Manager Tabs and select **Customize Command Manager**.




4. **Right click** on the 3DQuickPress Command Manager tabs and select **Delete** to remove current 3DQPress Command Tabs.

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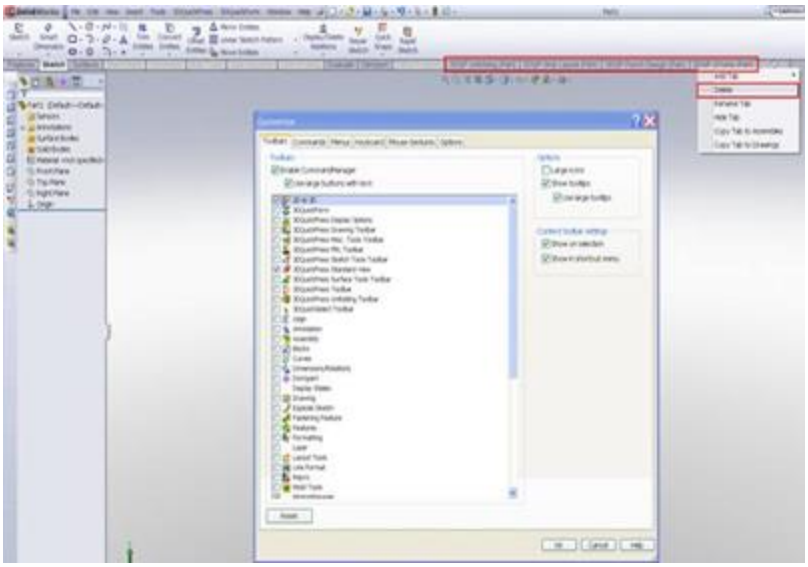
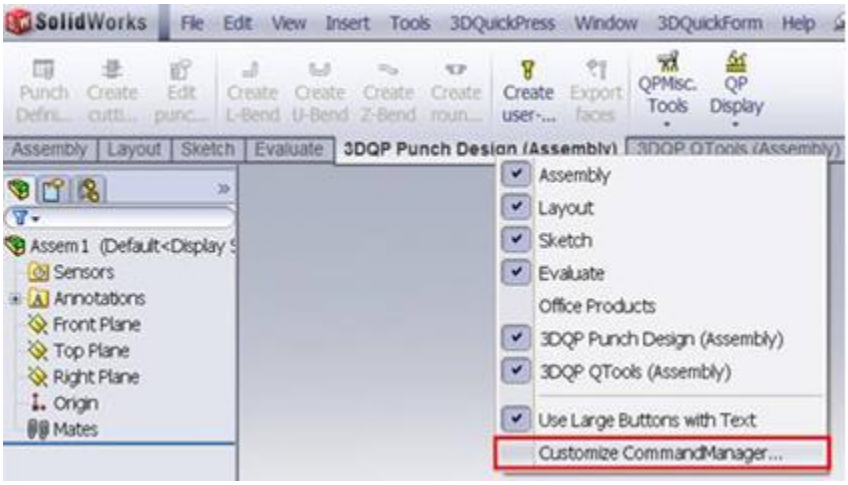


5. Select **File\Save** the part file to your desktop.
6. Click OK to exit.
7. **Start** a new Assembly file.
8. **Right click** on Command Manager Tabs and select **Customize Command Manager.**




9. **Right click** on the 3DQuickPress Command Manager tabs and select **Delete**.

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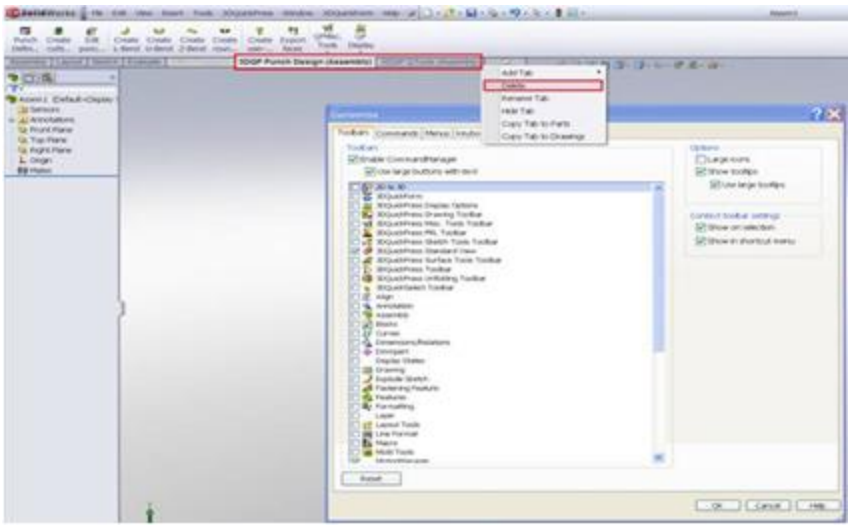

10. Select **File\Save** the Assembly file to your desktop.

11. Click OK to exit.

12. Close all documents and exit SolidWorks.

13. **Double click** on “3DQP ComTabs.reg” and say “Yes” when asked to update the command manager tabs. Delete the “3DQP ComTabs.reg” and Start SolidWorks again, you should see the new 3DQPress Commands Manager Tabs. **Note:** If a “3DQP ComTabs.reg” is not on your desk top skip to #16.


14. **Delete** the “3DQP ComTabs.reg” Part and Assembly files from your desktop then start SolidWorks again, **after opening a Part or Assembly file** you will see the new 3DQPress Commands Manager Tabs.

15. If, when loading the software you are prompt **“Unable to register the DLL/OCX: RegSvr32 failed with exit code 0x3”** Windows denied the registration of 3DQP.

16. Contact your 3DQPress representative at 920.268.1721 or email Ronf@callsts.com .

Posted by Ronnie Flaugh on October 12, 2012 at 12:35 PM
in 3DQuickPress | Permalink | Comments (0) | TrackBack (0)

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**March 05, 2014**

# Unfolding Imported Models With 3DQuickPress Inside of SolidWorks

Welcome to ***unfolding imported*** models with ***3DQuickPress***.

## Imported Model

Importing models from other CAD software has never been an exact science for multiple reasons. The data usually comes to the designer in the format of IGES, STEP, Parasolid, or possibly native Pro/E, Inventor, and UG files if not thru multiple translations prior to receiving the model. Fortunately, *SolidWorks*can import all of these data types, along with many others.

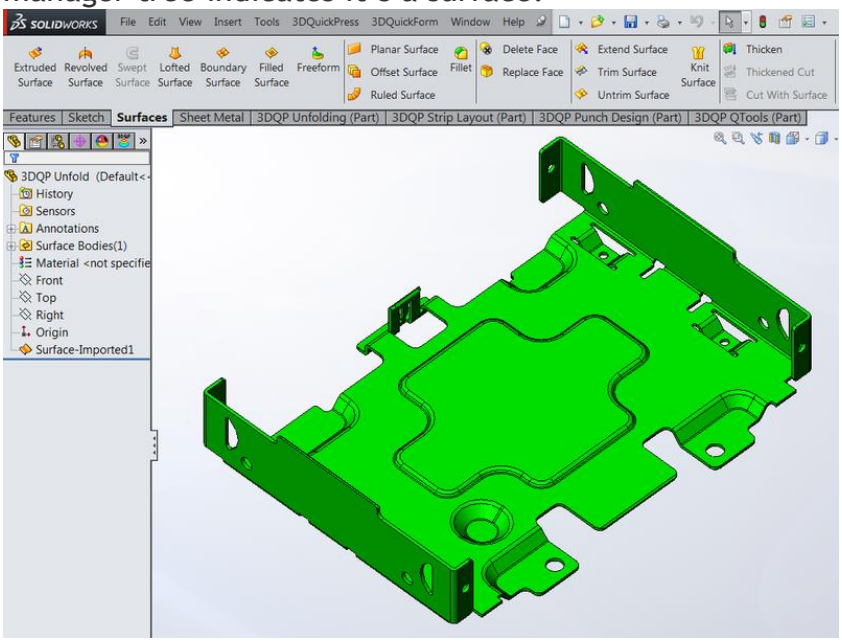
1. The result of the imported model can be different depending on the process prior to importing, which may cause re-modeling work for the out of the box*SolidWorks Sheetmetal* recognize. ***3DQuickPress*** simplifies the process.

2. Advanced models with shapes, uneven material thickness, and non-solid models are just some of the reasons *SolidWorks Sheetmetal* may not recognize the features to create and unfold the model.

3. ***3DQuickPress*** simplifies the process by only needing the *Top, Bottom, and a Material thickness surface* knitted together before the unfolding process can begin.

## 3DQuickPress Unfolding

1. Shown below, a **Parasolid x_t** after importing into *SolidWorks* and running diagnostics, the part file was not able to knit to form a solid Model. The feature manager tree indicates it's a surface.

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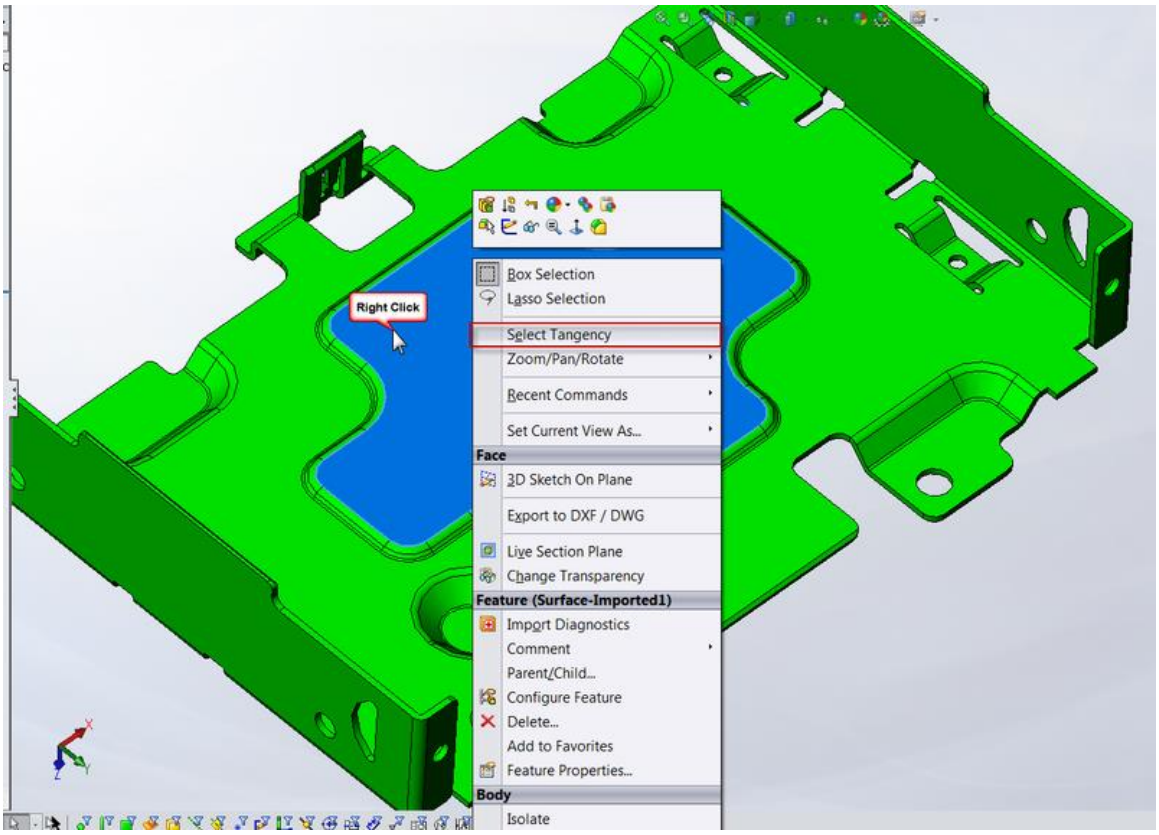
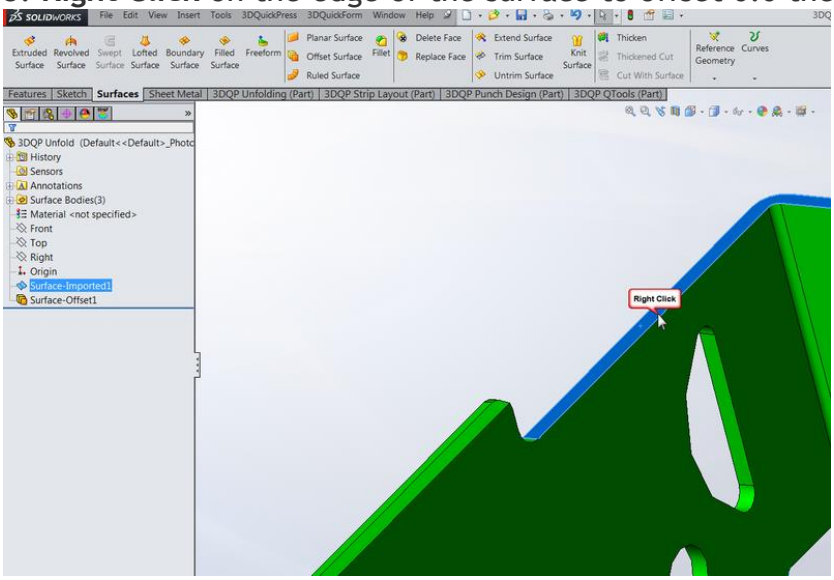
2. **Right click** on the surface and select the tangent surface and offset the surface 0.0 and repeat the process for the opposite side.




3. **Right Click** on the edge of the surface to offset 0.0 the material thickness.




4. After offsetting each surface by 0.0, then select the 3 new surfaces from the feature tree and knit them together, hide the original surface.

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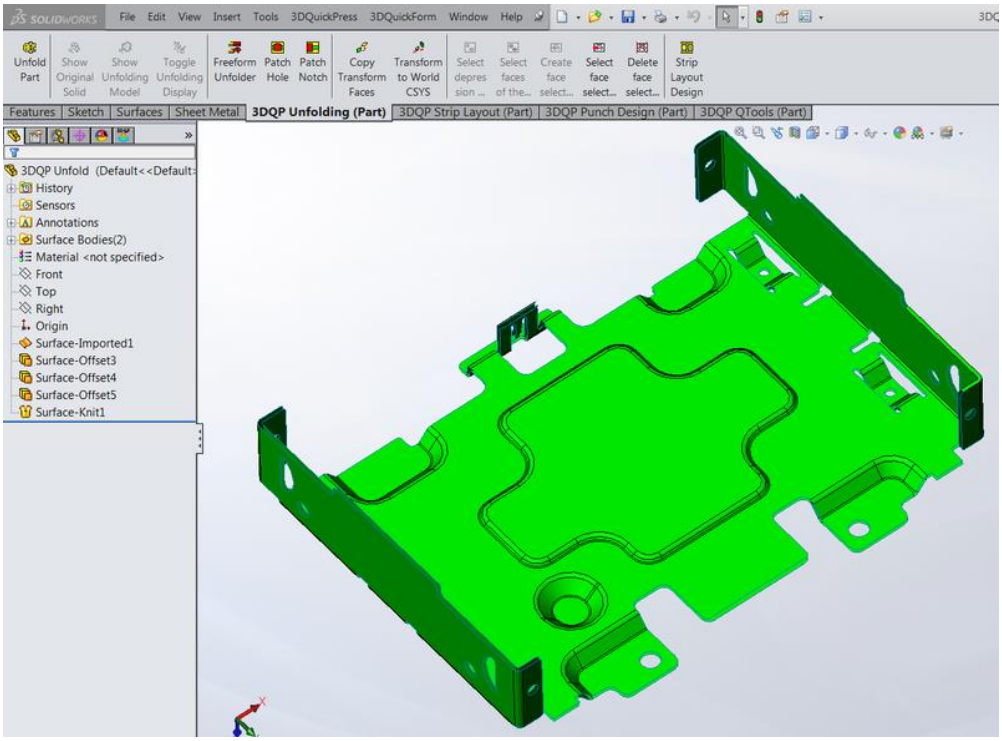
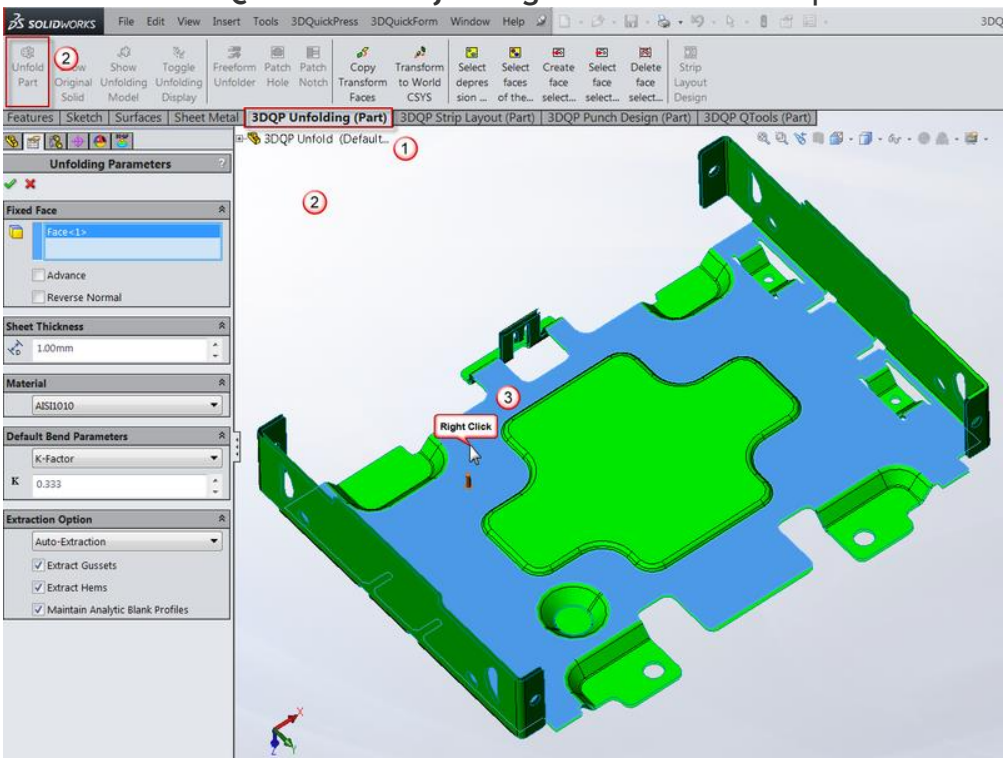



5. From the ***3DQuickPress Unfolding tab*** select Unfold part.




6. ***3DQuickPress unfolds*** and **Auto Recognizes** the knitted surface with just a top, bottom and material thickness. ***3DQuickPress*** also has ***UAR "User assist recognition"*** to continue advance unfolding with accurately.

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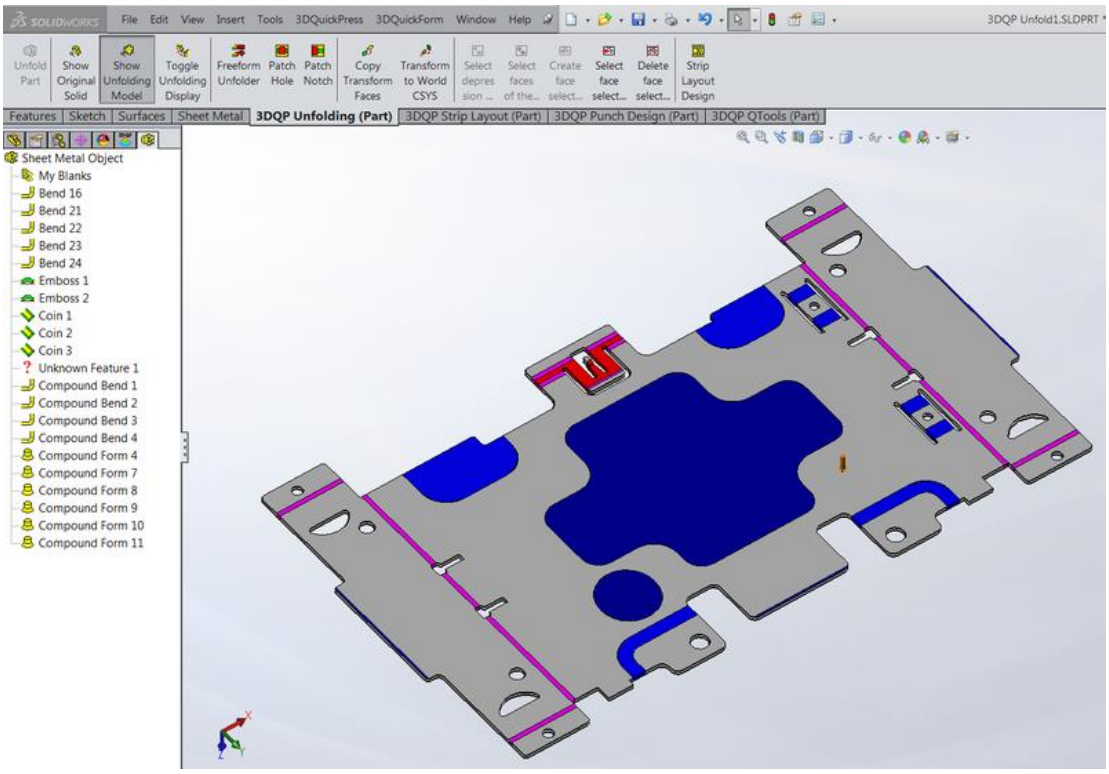


7. ***3DQuickPress*** can save the designer hours if not days from remodeling or completely redesigning the model.

Ronnie C Flaugh
Technical Analyst
Strategic Technology Solutions
Computer Aided Technology, Inc.

Posted by **Ronnie Flaugh** on March 05, 2014 at 09:34 PM
in **3DQuickPress**, **SolidWorks** | **Permalink** | **Comments (0)**

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**April 08, 2014**
**(Extracted from CATI Blog at http://blog.cati.com/solidworks/)**

# How to Setup and Import ECO changes with 3DQPress inside SolidWorks

Welcome to **Setup and Import ECO** changes inside ***unfolded*** **3DQPress model.**

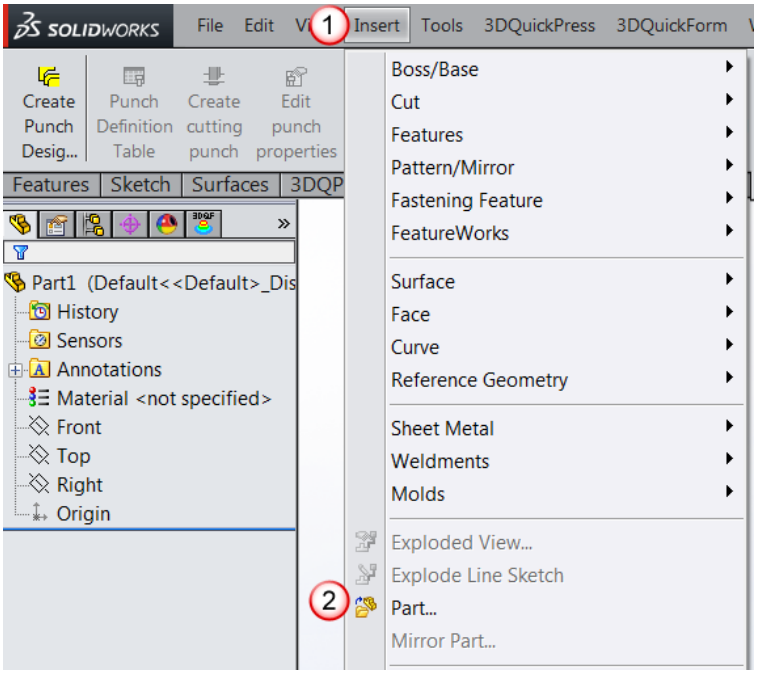
After the model has been imported *SolidWorks assigns a different ID* code to every model. In this blog, I will explain the **3DQPress** process on how to use the original model, import the ECO changes, and then update the unfolded model.

## Setup

1. Import the model, and then save the file name as needed then close the file.

2. Using *SolidWorks* open a new part file.

3. From the top ribbon select Insert\Part.




4. Select the rename imported part and click the check OK.

5. *SolidWorks* opens the insert part options dialog menu as shown below.

6. The only transfer we need is the Solid Bodies.

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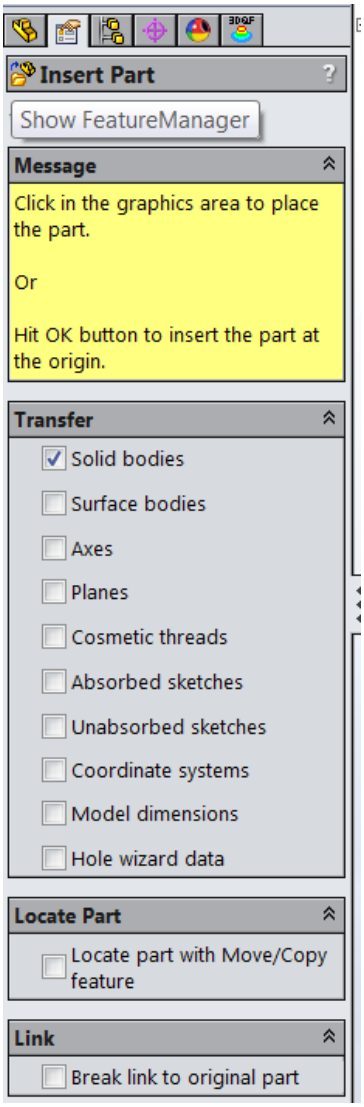


7. After completing the process, now we have a part file referencing the original model that was imported.

8. The user can tell the reference is active by the -> shown in the tree by the part file.


9. The next step is to lock the reference.

10. Right click on the **ECO change** part in the tree and select from the menu *List External Reference*.

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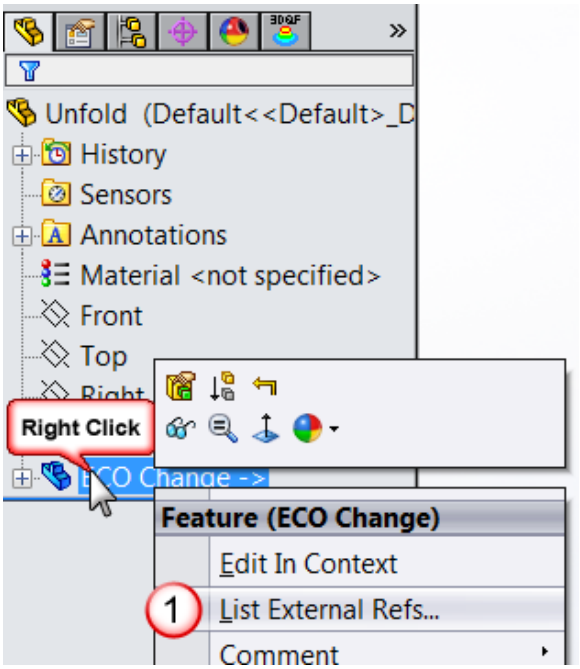
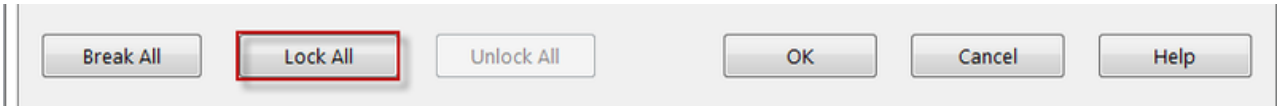
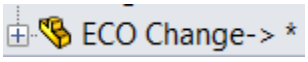



11. From the *External Reference* menu select **Lock All**.




12. After selecting the **Lock All**, *SolidWorks* lock the reference to the original imported model by the ->* shown in the tree by the part file.




13. Now the model is ready for the **3DQPress** Unfolding process.

## 3DQPress Unfolding

1. Start the Unfold process by selecting **3DQPress**icon on the **3DQPress Unfolding** toolbar.

2. Select the highlighted face as the fixed face; click *OK* to start unfolding the model.

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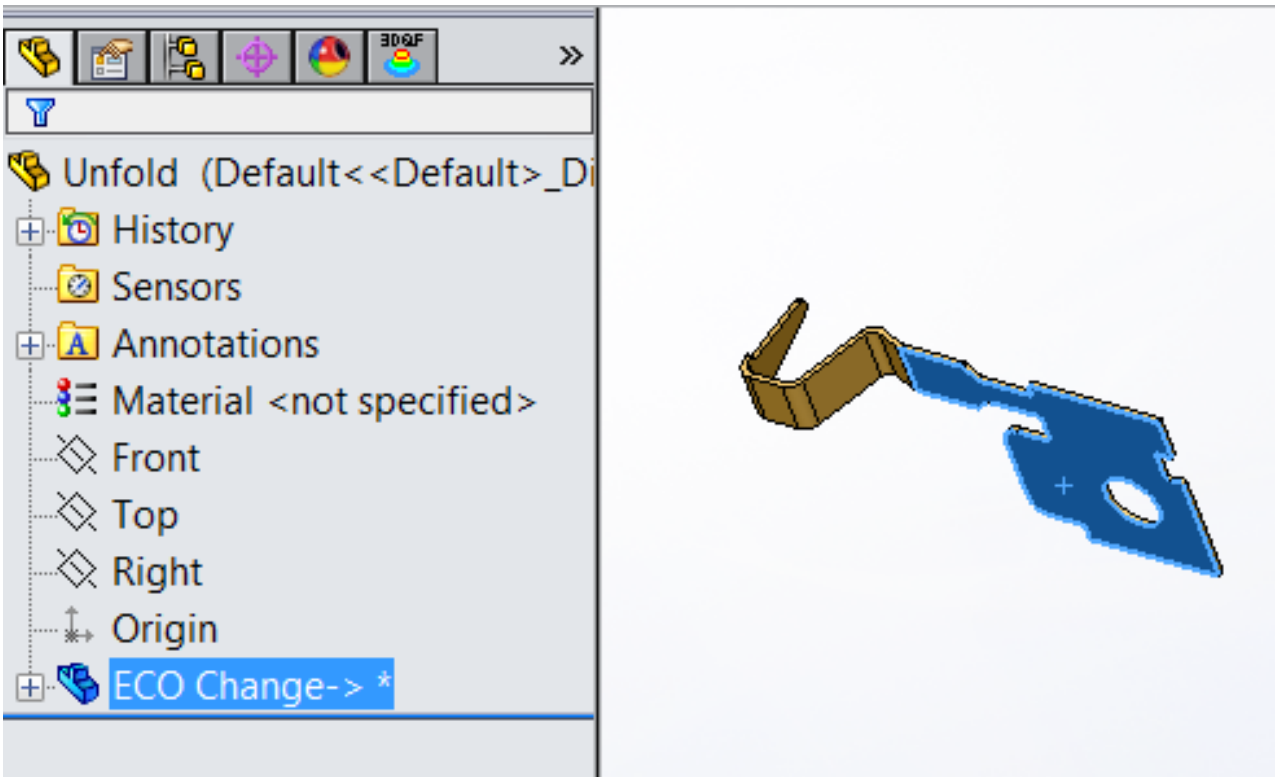
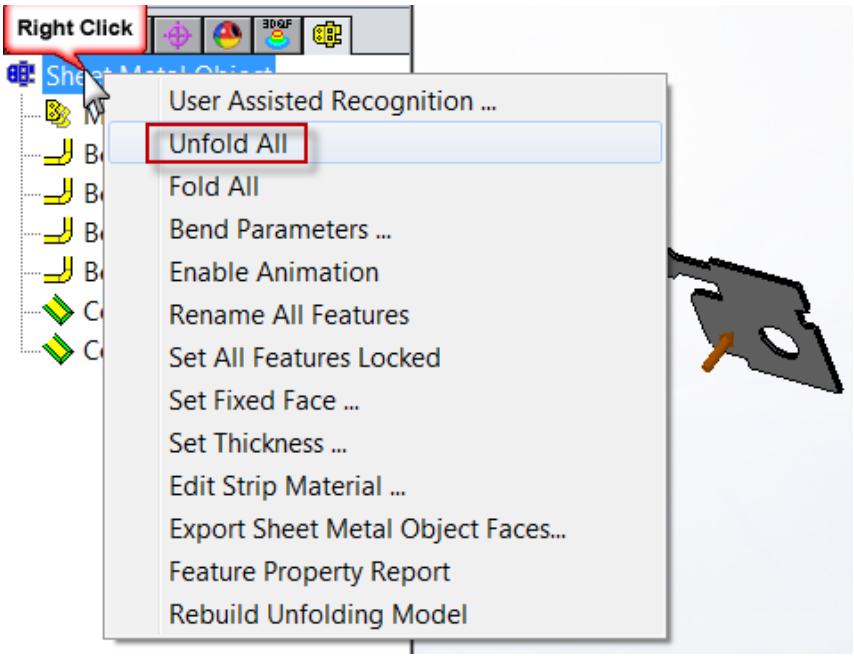



3. Click **OK** to accept the bend allowance.

4. Right click on the *Sheetmetal Object* and unfold all.

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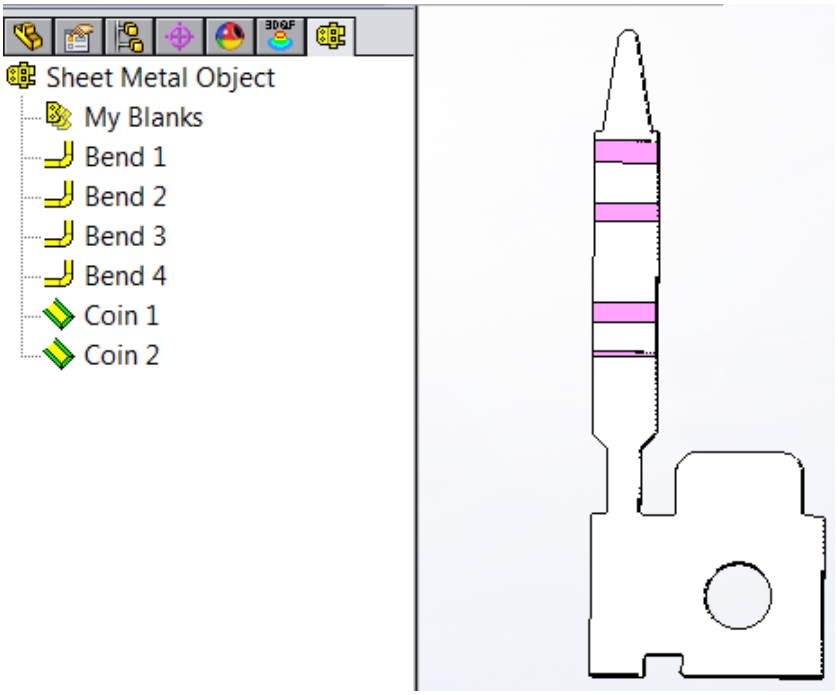


5. Now the model is ready for the ECO change.

**ECO Rev B Imported**

1. Import the new ECO model into SolidWorks and save the part file as the revision. *Caution*: Be careful not to re-name the new model same as the original.

2. Open the original model.

3. From the **3DQPress Punch Design** toolbar select the *QPMisc*. *Tools*.

4. From the pull down menu, select the QT Selection toolbar.

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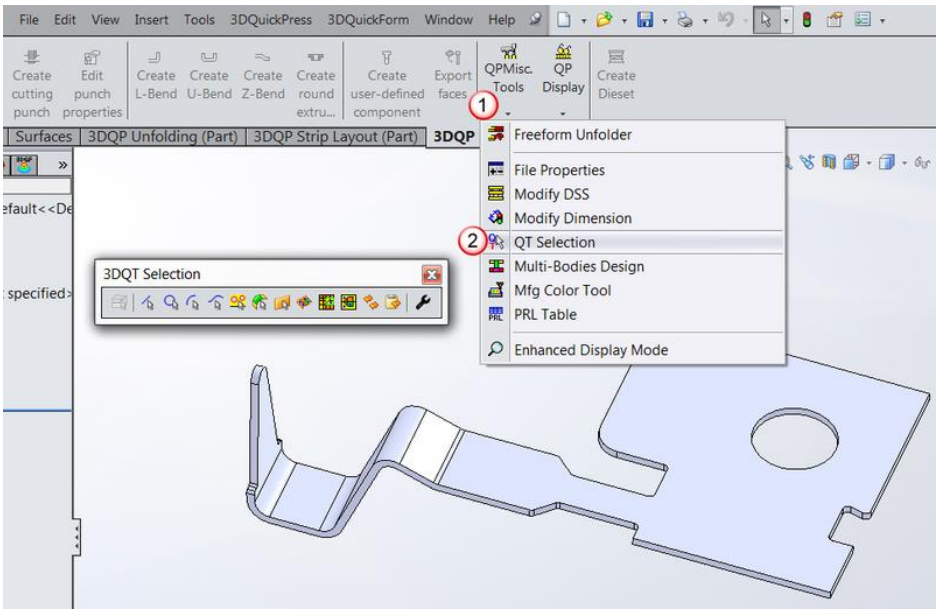


5. Right click the top face of the **ECO Rev B** model and select tangency.

6. Roll the model to the other side, hold the Ctrl button and right click the bottom surface, select tangency.

7. With the top and bottom surface highlighted, select from the **3DQPress Selection** menu the copy surface icon.


8. The **3DQPress** *Copy Faces* command will save the selected surfaces to the notepad referencing the Origin location of the model.

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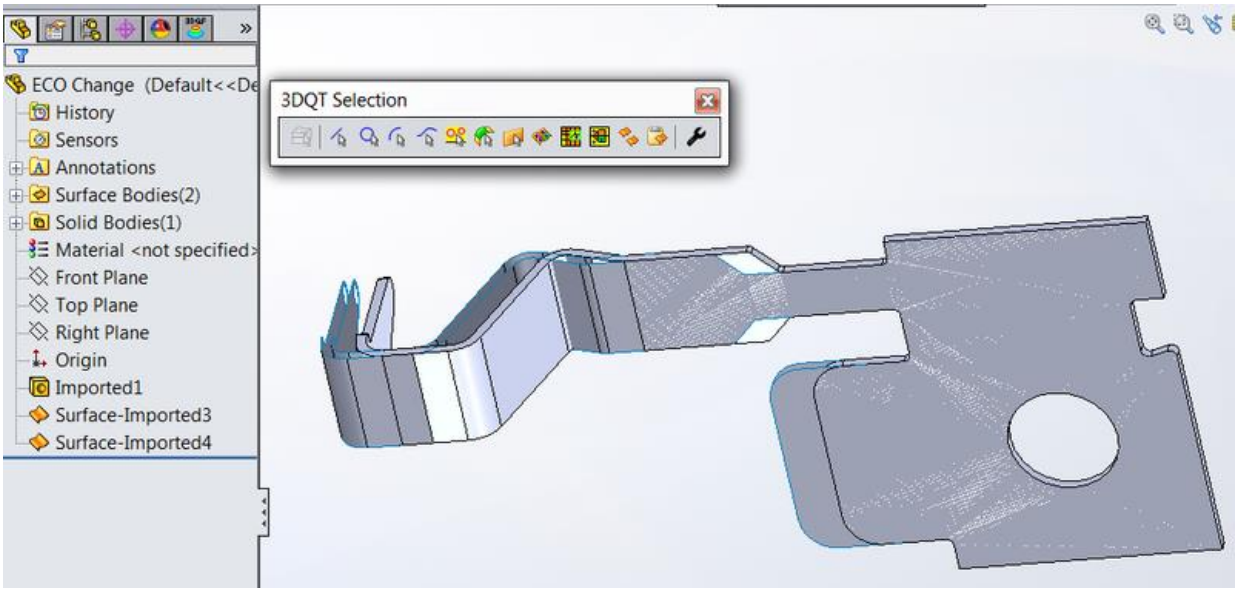
9. From the *SolidWorks* top ribbon, select Window to open to the reference file ECO Change.

10. With the **3DQPress Selection** menu still open select the paste faces command.




11. **3DQPress** imports the top and bottom surfaces from the *ECO Rev B* model at the same **Origin** as the reference model.

12. Now the Referencing model can be updated to the new *ECO Rev B* change, and because the ref. is still locked it will not affect the unfolded model until you unlock the referencing updating the model when you decide limiting the affects of the *SolidWorks* ID.

13. Reorder the surfaces in the tree above the Imported1 feature.

14. Make the changes to the model referencing the surfaces using *SolidWorks* modeling techniques, and then hide all reference surfaces.

## Update the Unfolded Model with ECO Rev B Changes

1. With both models open in *SolidWorks*, right click on the **ECO Change** part file.

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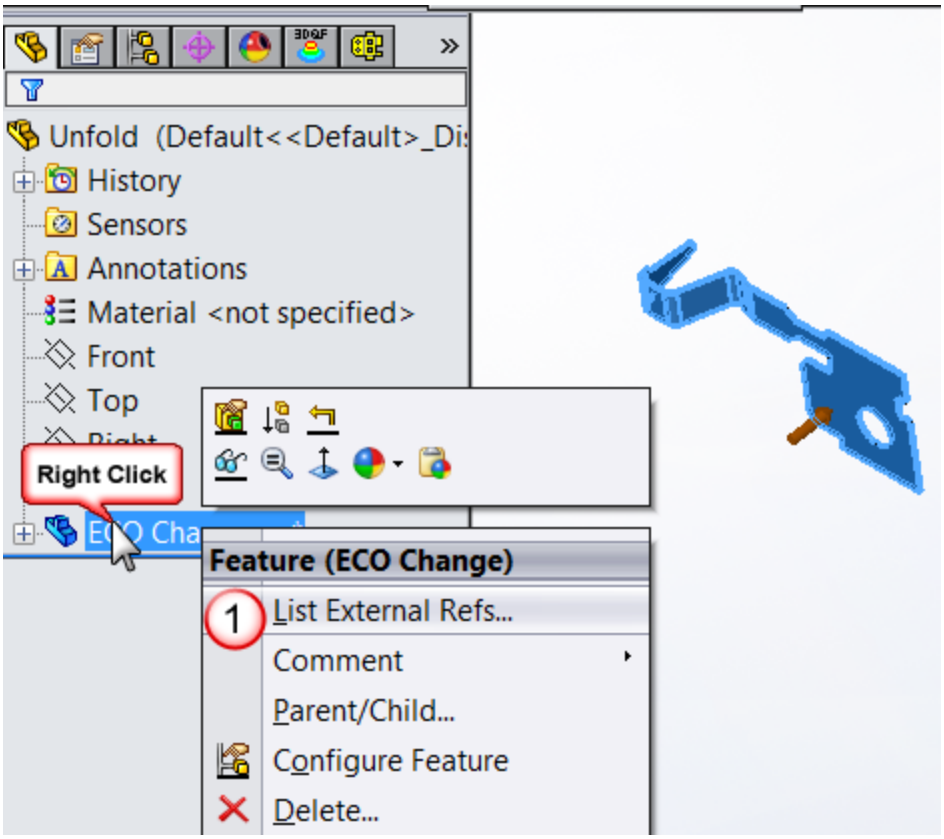


2. From the *External Reference* menu select **Unlock All**.

3. The model will update adding the *ECO Rev B* change.

4. Select the **3DQPress Unfolding** tab and *Show Original Solid and Show Unfolding Model*.

5. With both models showing, you can see the difference in the undated model and the “waiting on a rebuild” **3DQPress** Model.

6. When you are ready, right click on the *Sheet Metal Object* and select rebuild to add the *ECO Rev B* update.

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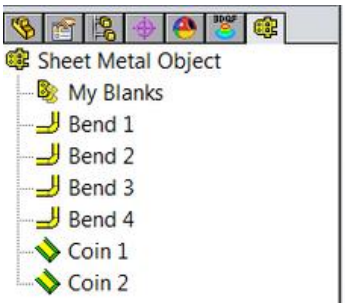


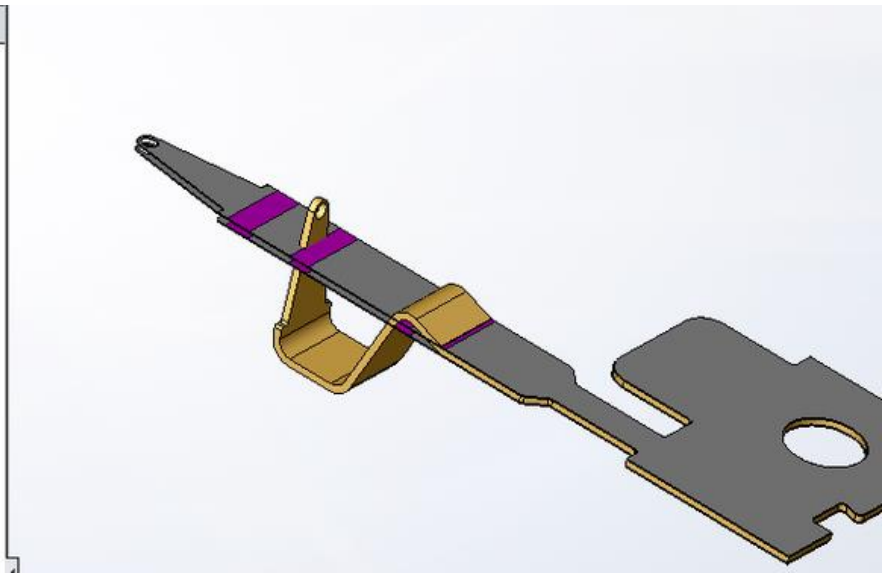

Ronnie C Flaugh
Technical Analyst

Posted by **Ronnie Flaugh** on April 08, 2014 at 06:30 PM in **3DQuickPress** | **Permalink** | **Comments (0)**

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**May 14, 2014**
**(Extracted from CATI Blog at http://blog.cati.com/solidworks/)**

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# How to update ECO changes to 3DQPress Strip layout inside SOLIDWORKS

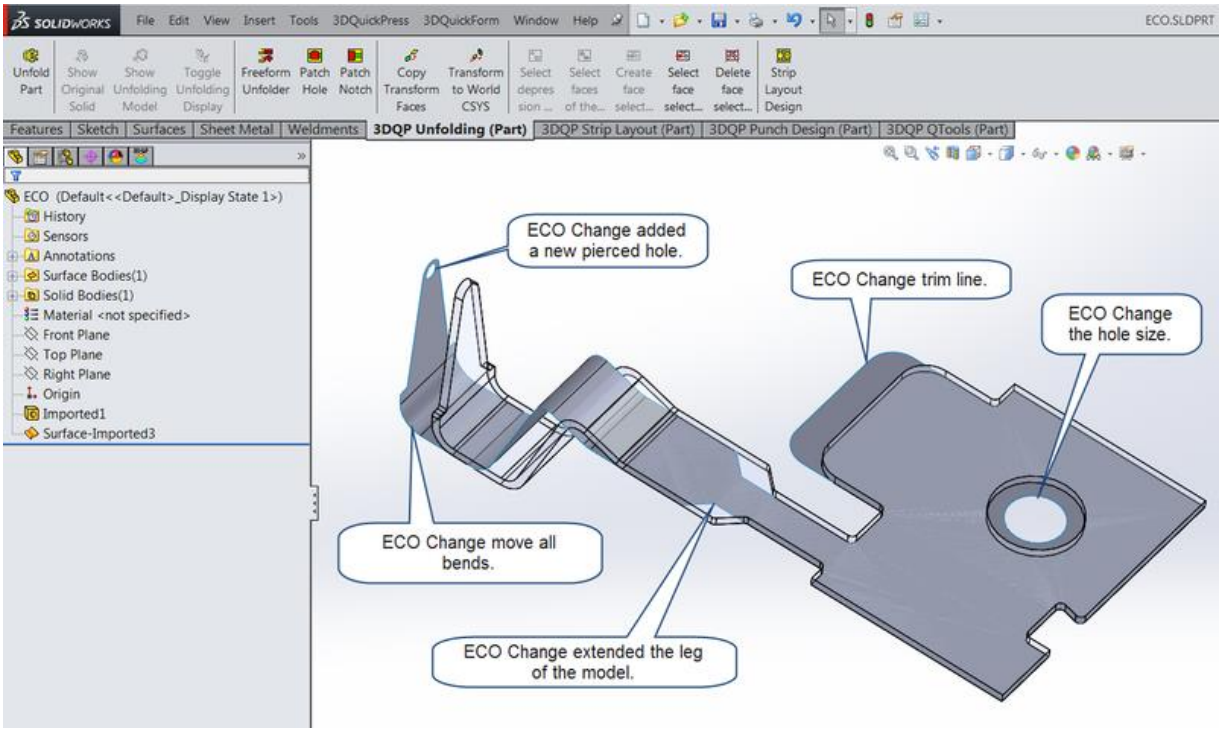
Welcome to **ECO changes to *3DQPress Strip layout.***

After the ECO changes have been made to the unfolded model, **3DQPress Strip layout** will trigger the rebuild on the strip. Depending on the process used to update ECO changes to the unfolded model, *SOLIDWORKS* will handle each one of them differently. In this blog, I will explain the **3DQPress** process to update the **Strip layout**.

## Setup

1. Start with my previous blog "How to setup and import ECO changes with **3DQPress** inside of *SOLIDWORKS*".

2. Before we open the **3DQPress Strip Layout** I would like to highlight the ECO changes that were updated in the unfolded model.




## 3DQPress Unfolding

1. After updating and rebuilding the unfolded model you are ready to continue updating the ECO Change to the **3DQPress Strip Layout**.

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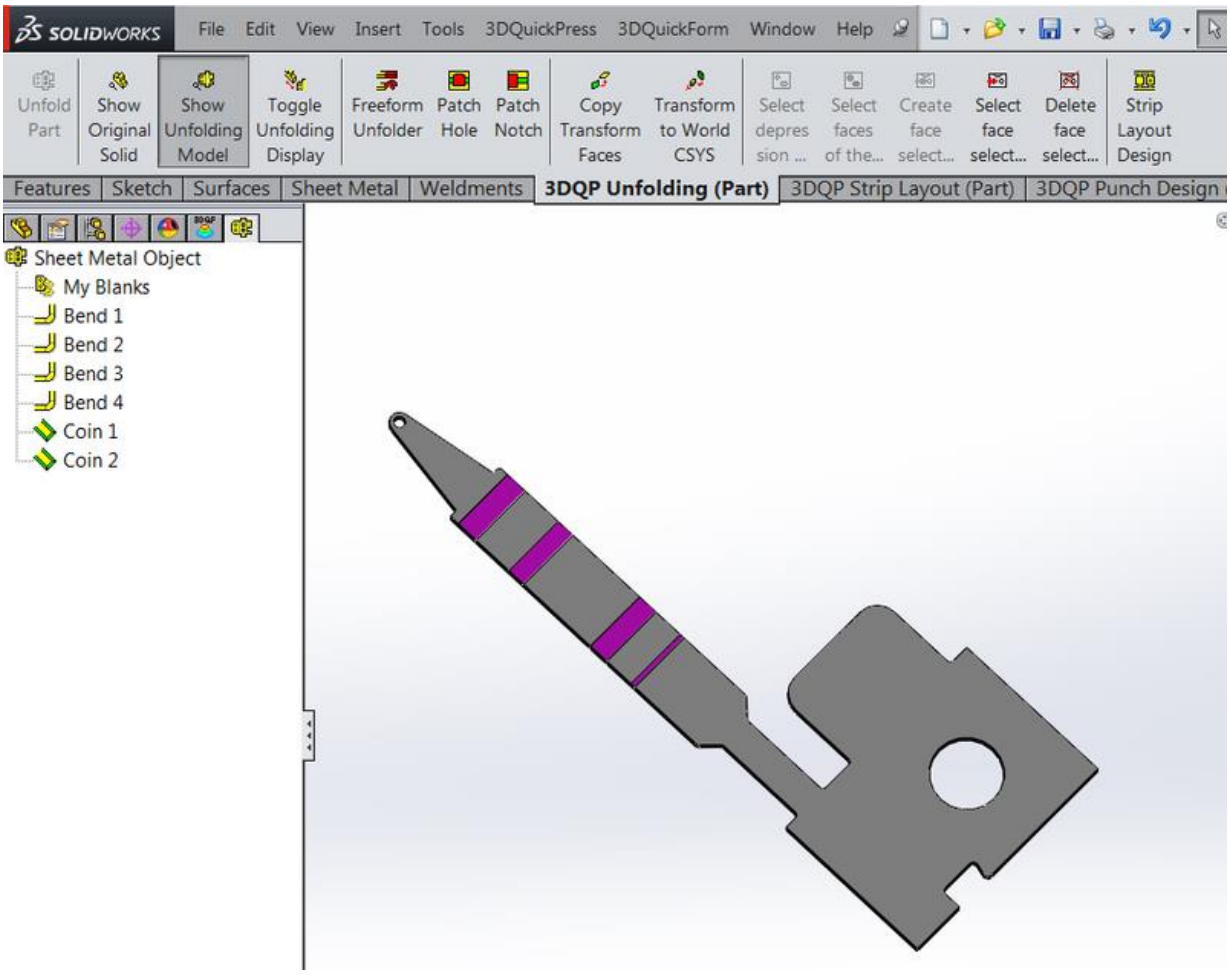


## 3DQPress Strip Layout

1. As shown: the **3DQPress Strip Layout** *before* the ECO change is rebuilt.

2. The ECO change of the unfolded model triggers a **3DQPress Strip Layout** rebuild to signal an update is available.

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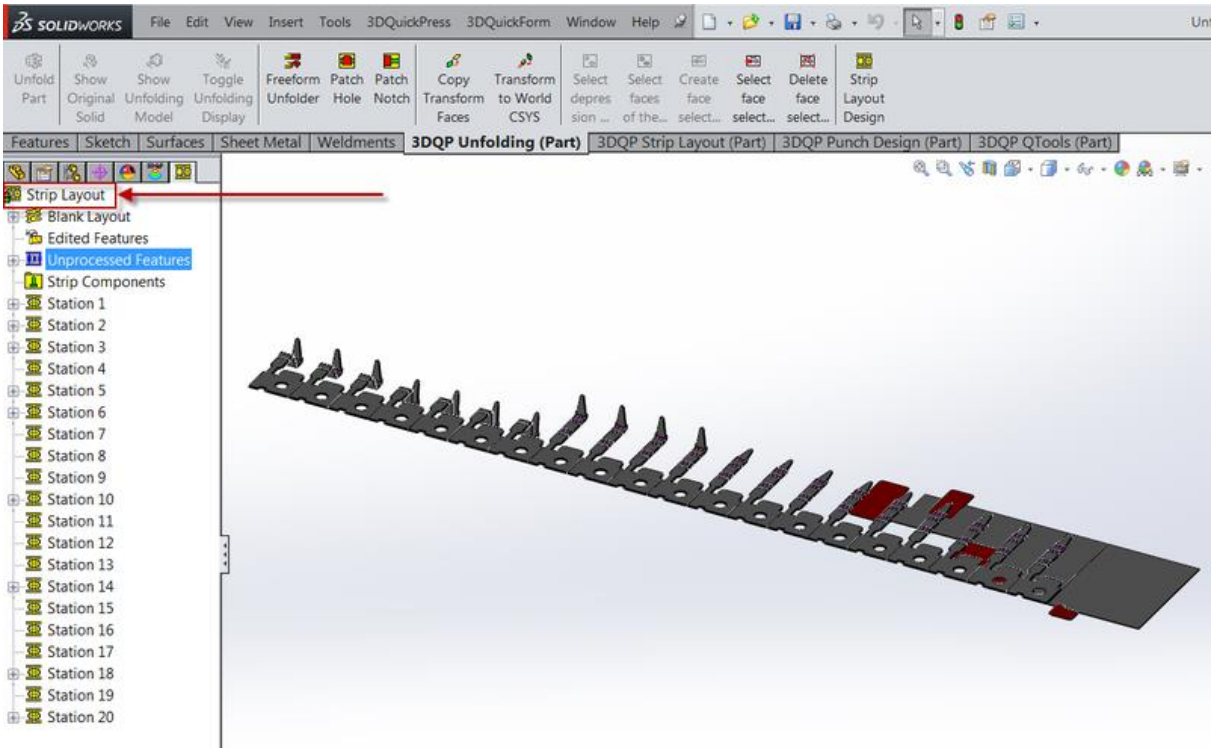


3. Right click on the feature in the design tree of *SOLIDWORKS*. Then, select the Rebuilt Strip Layout Model as shown below to trigger the ECO Change update.

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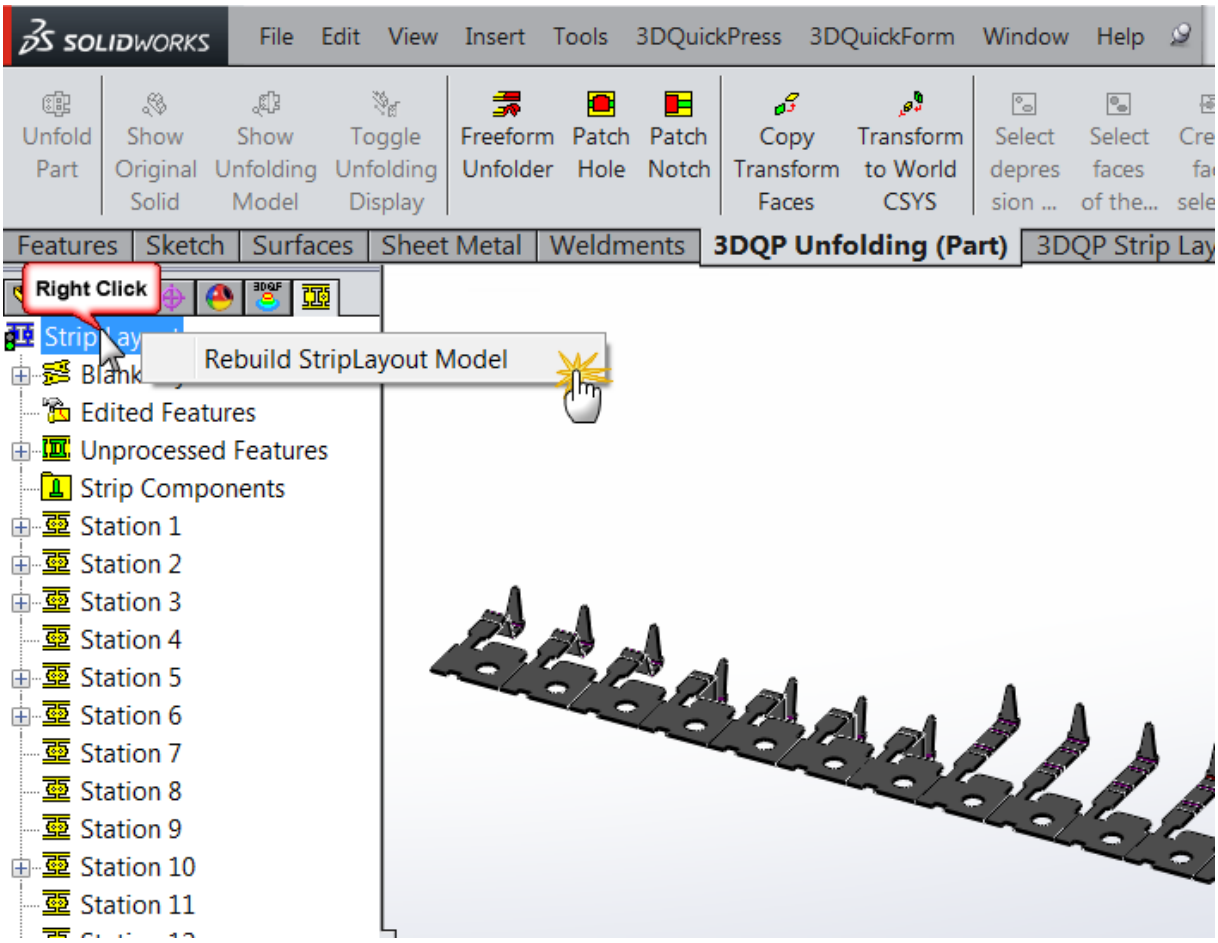


4. After rebuilding the **3DQPress Strip Layout** it updates the *SOLIDWORKS* sketches without any issues.

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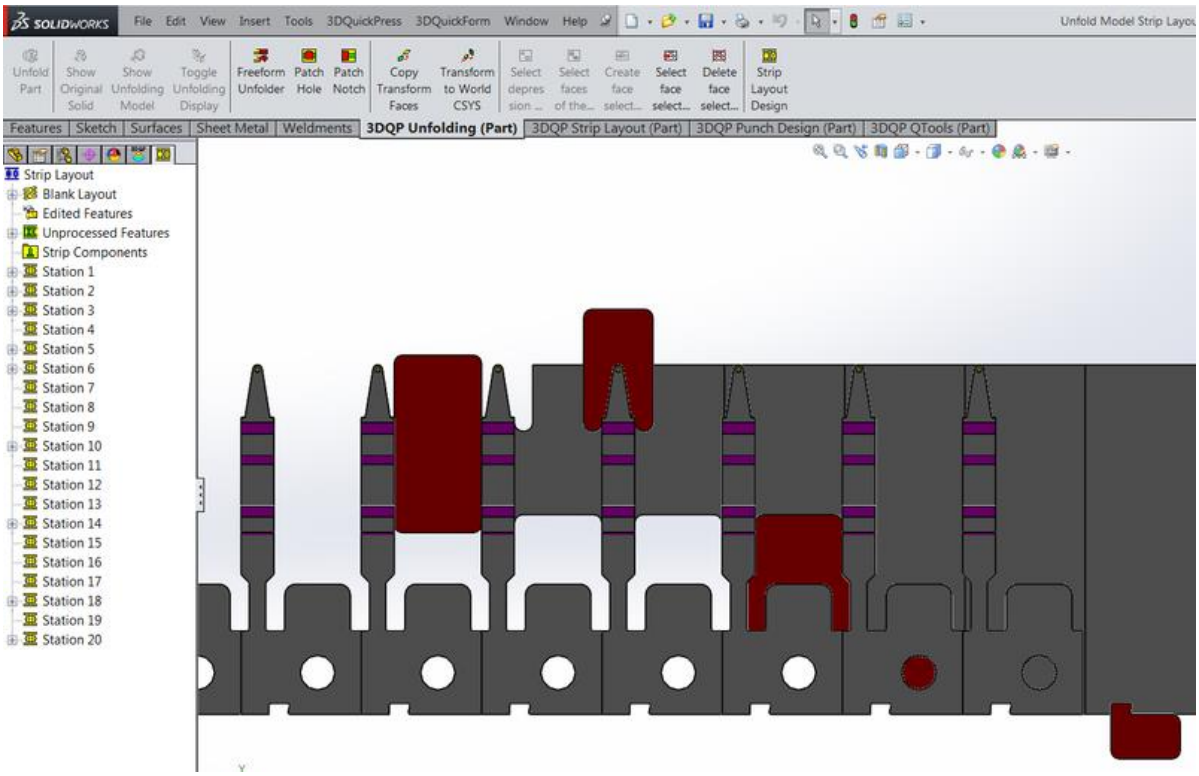
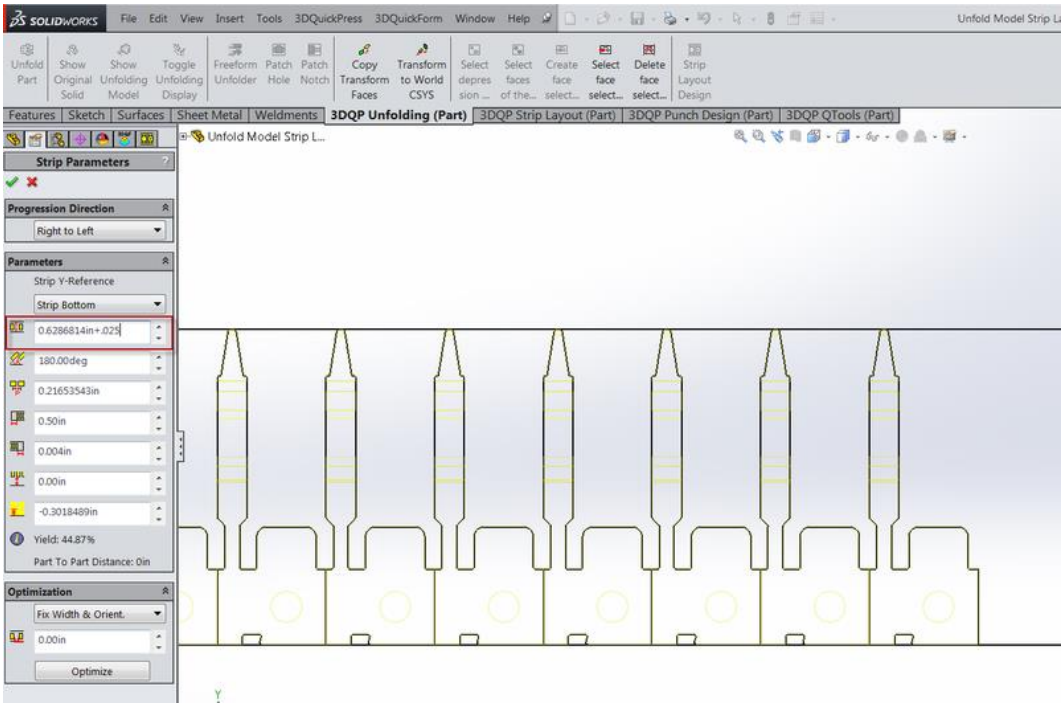



5. The ECO Change of the leg extended will require the Strip width to be increased as needed. Right click on the Strip Layout design tree of *SOLIDWORKS* and select edit strip parameters.

6. In this case, add .025in to the Strip width parameter and click the *CHECK* to update the width of the Strip.

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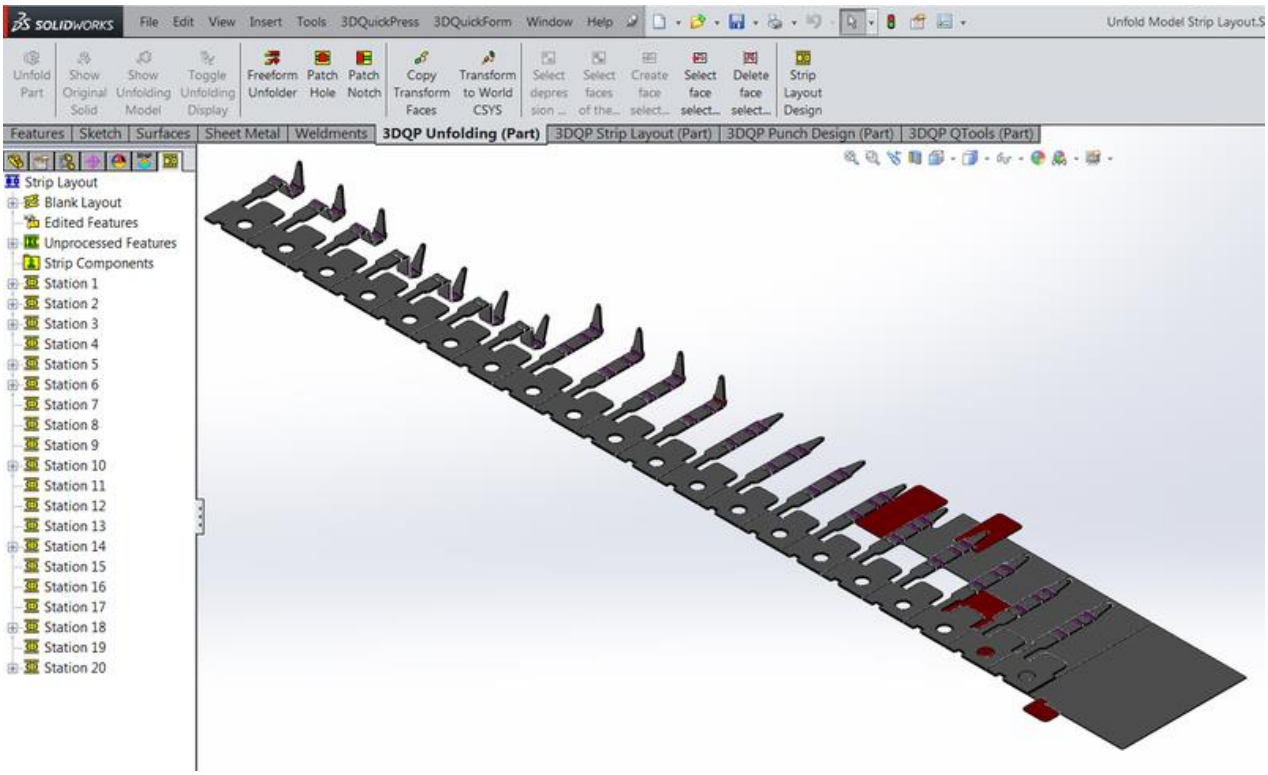
7. As shown below: the **3DQPress Strip Layout** Stock Width updates.




8. As noted, ECO changes update the **3DQPress Strip Layout** with ease. I would suggest to contact your support *Technical Analyst* to follow the best practice using *SOLIDWORKS* to update the ECO changes to the unfolded model.

Ronnie C Flaugh
Technical Analyst
Strategic Technology Solutions
Computer Aided Technology, Inc.

Posted by **Ronnie Flaugh** on May 14, 2014 at 09:00 AM
in **3DQuickPress**, **SolidWorks** | **Permalink** | **Comments (0)**

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**June 18, 2014**

**(Extracted from CATI Blog at [http://blog.cati.com/solidworks/](http://blog.cati.com/solidworks/))**

# How to update ECO changes to 3DQPress Punch Design inside SOLIDWORKS

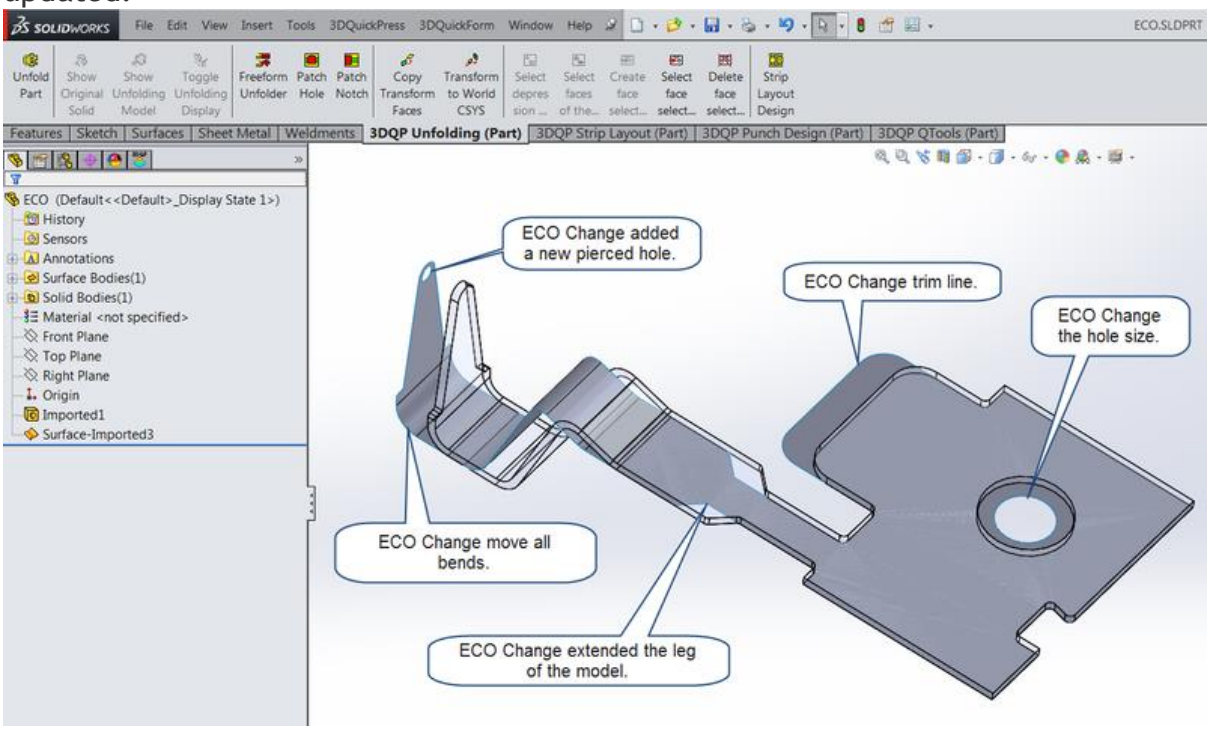
Welcome to **ECO changes to 3DQPress Punch Design**.

After the ECO changes have been made to the *unfolded model* and the *Strip layout* the **3DQPress Punch Design** will trigger a note stating the Strip Layout has changed. Depending on **how and the process used** to update ECO change to the *Unfolded* and the *Strip Layout*, *SOLIDWORKS* will handle each one of them differently. In this blog I will explain the process **3DQPress** uses to update ECO Changes to the *Punch Design*.

Setup

1. From previous blog "How to setup and import ECO changes with **3DQPress** inside of *SOLIDWORKS*".

2. Before we open the strip layout I would like to hi-light the *ECO Changes* that was updated.




3. From previous blog "How to update ECO changes to **3DQPress Strip layout** inside of *SOLIDWORKS*".

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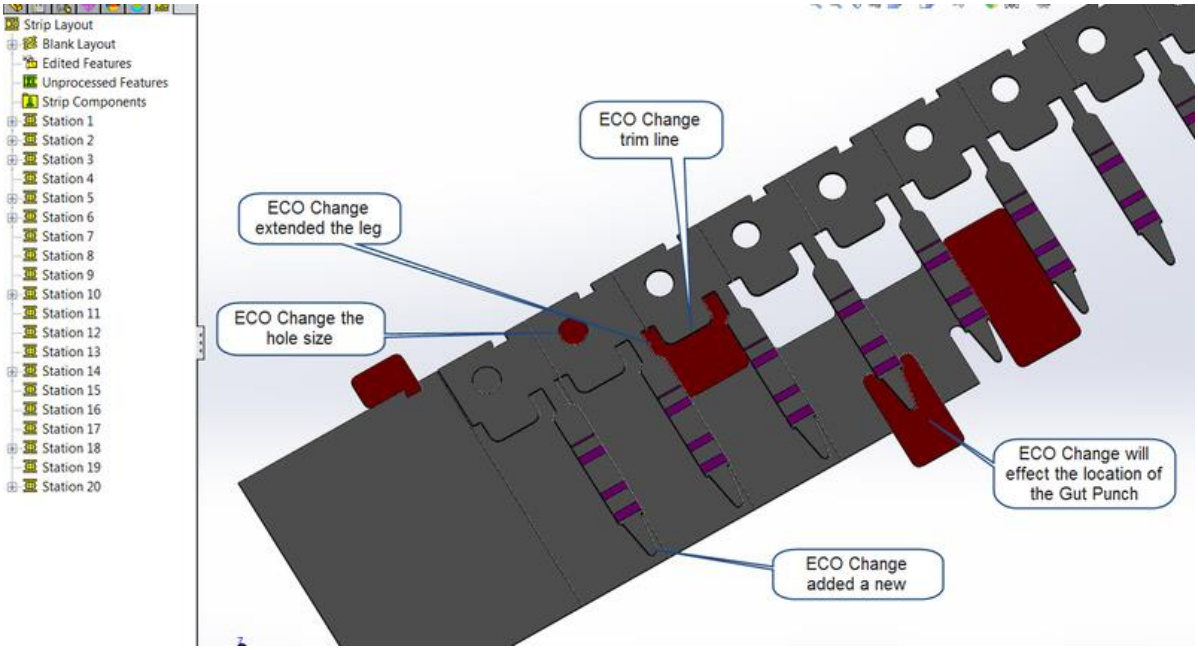
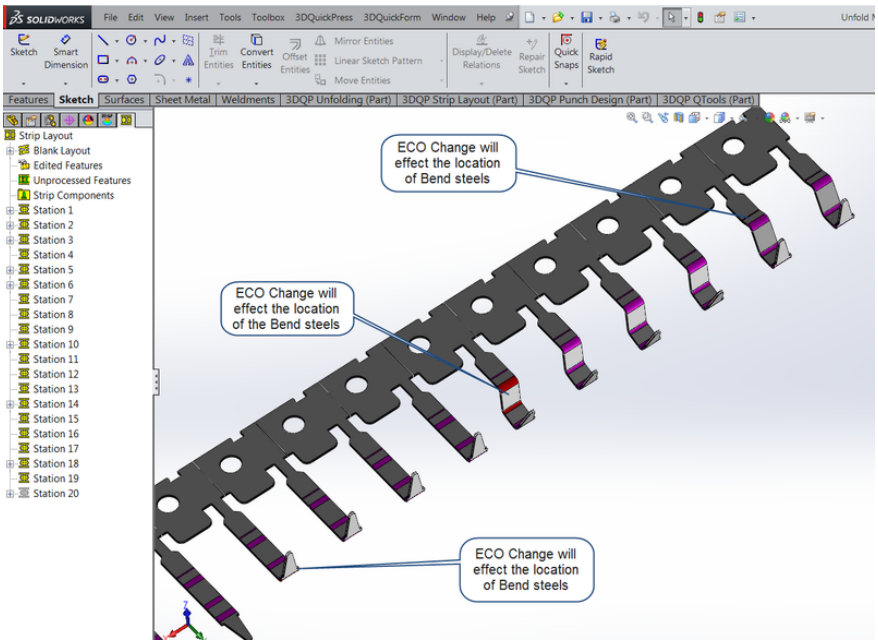
4. Before we open the Punch Design I would like to hi-light the ECO changes that will affect the **3DQPress Strip layout**.

5. Gutting punches that were affected by the ECO Changes to the **3DQPress Strip layout**.




6. Bending punches that were affected by the ECO Changes to the **3DQPress Strip layout**.

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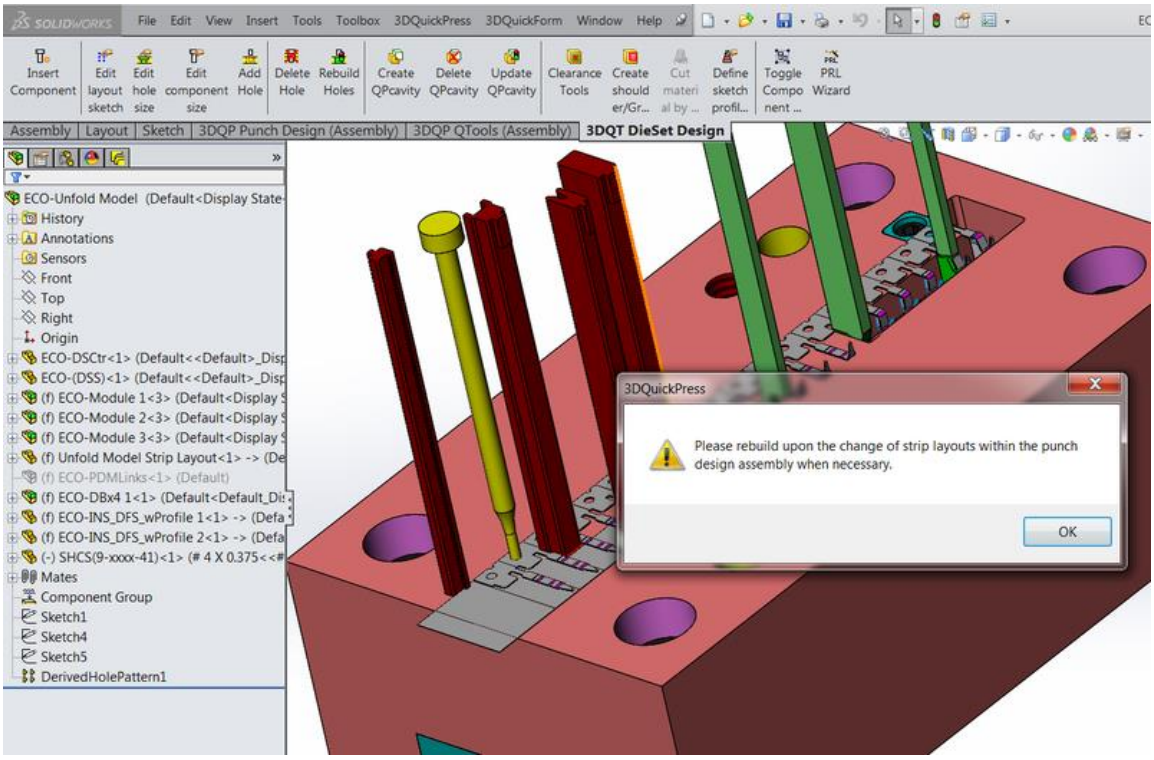
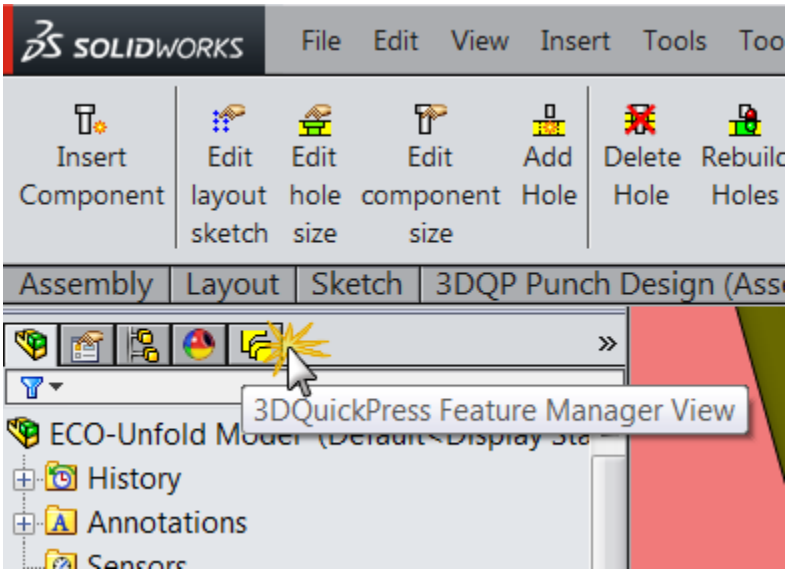
7. From previous blog “How to update ECO changes to **3DQPress Strip layout** inside of SOLIDWORKS” has been updated.

8. Open the **3DQPress Punch Design**, a note warning a change made to the Strip layout.




9. Select the 3DQPress Feature manager viewer.

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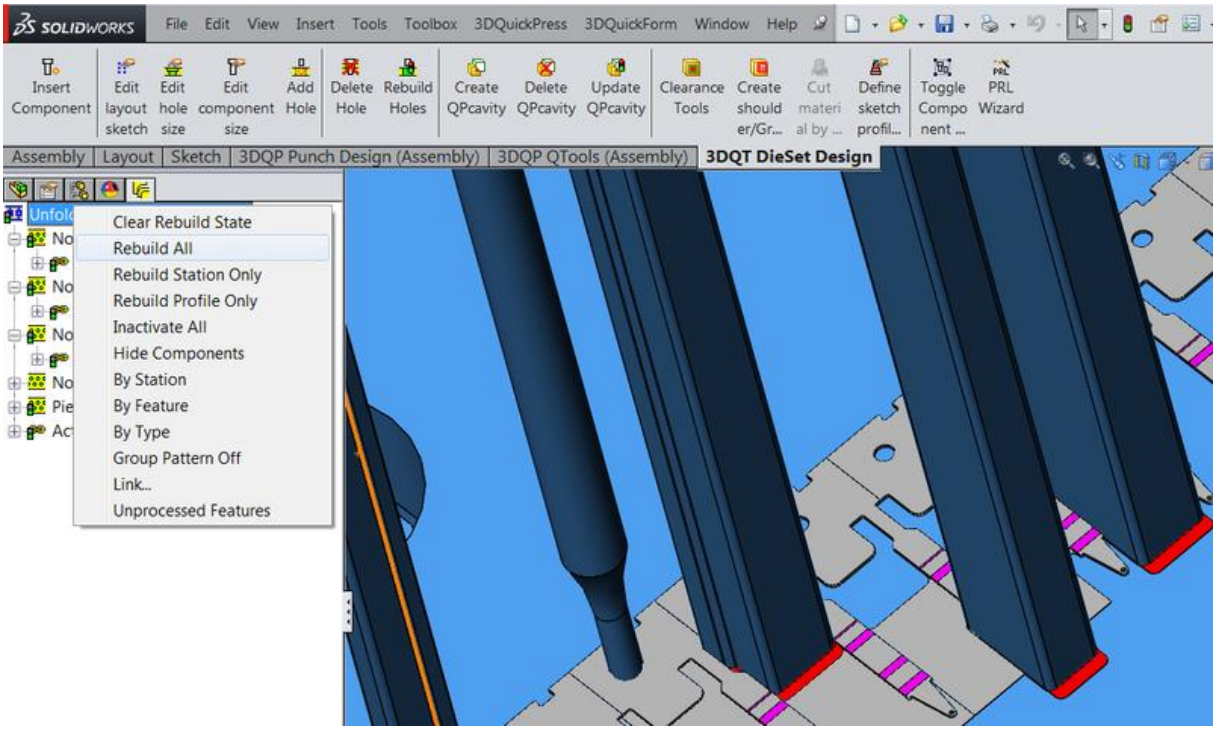
10. **3DQPress** empowers the user to decide how and when to rebuild the *ECO Changes*.

11. Looking down the *SolidWorks Feature Manager* tree **3DQPress Feature Manager** shows the rebuilds and the status on each *ECO Change*that was updated.

12. With a right click on the top feature **3DQPress** gives the use options to consider for updating the *ECO Changes* in the *Punch Design*.

13. Rebuild all, by station or profile as just some of the options the user has to choose from, if you decide not to update select clear rebuild.




14. In this blog I am going to step thru the process one profile or station at a time.

15. *Round Standard Punch:* The diameter was decrease, when the **3DQPress Strip layout** updated the feature the old feature was deleted and a new one was created in its place, the feature manager shows a RED-X indicating the profile will not update, the user has 2 options in this situation.

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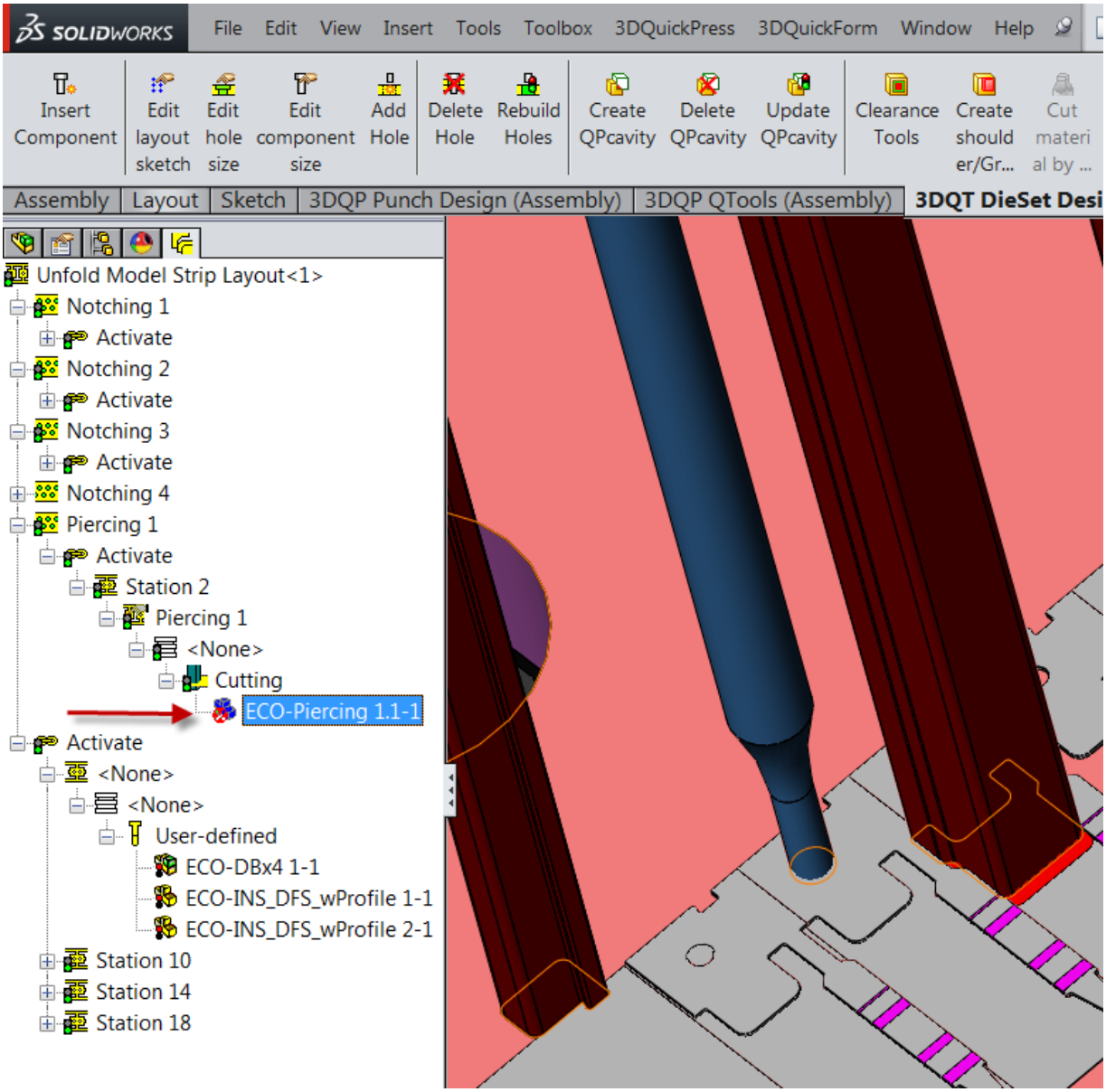


16. 1st option is to open the current *Round Standard Punch* and update to point diameter along with the properties for the BOM.

17. 2nd option is to delete the current *Round Standard Punch* and re-insert a new *Round Standard Punch*.

18. *Notching 2*: Expand the feature tree to the ECO-Notching 2.1-1, right click on the feature and select *Rebuild Profile Only* will start the rebuilding process of the new profile from the ECO Change.

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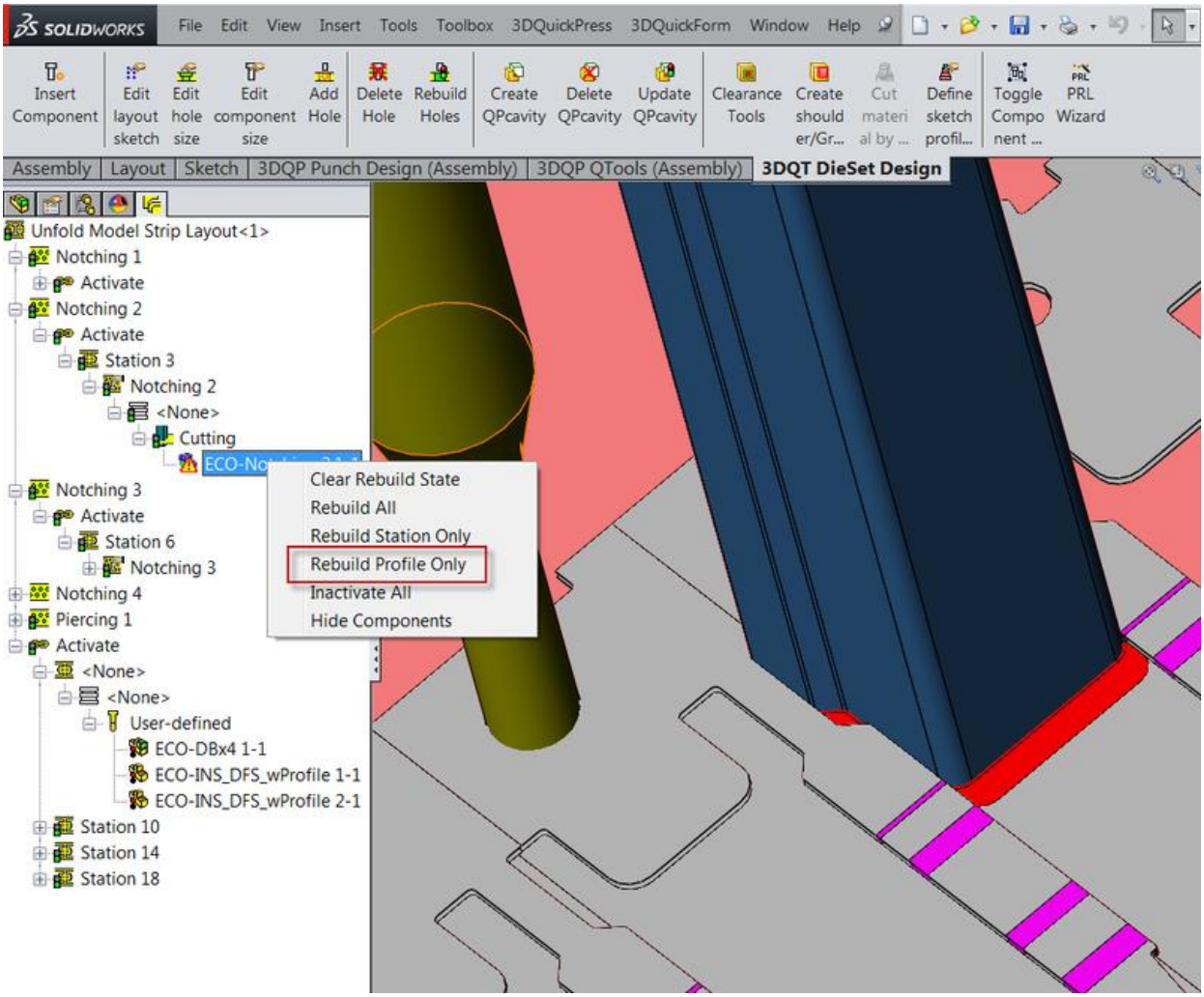


19. *Notching 2:* After the profile rebuild completes, right click on the feature and select *Rebuild Station Only* to align the punch to the updated location of the *ECO Change*.

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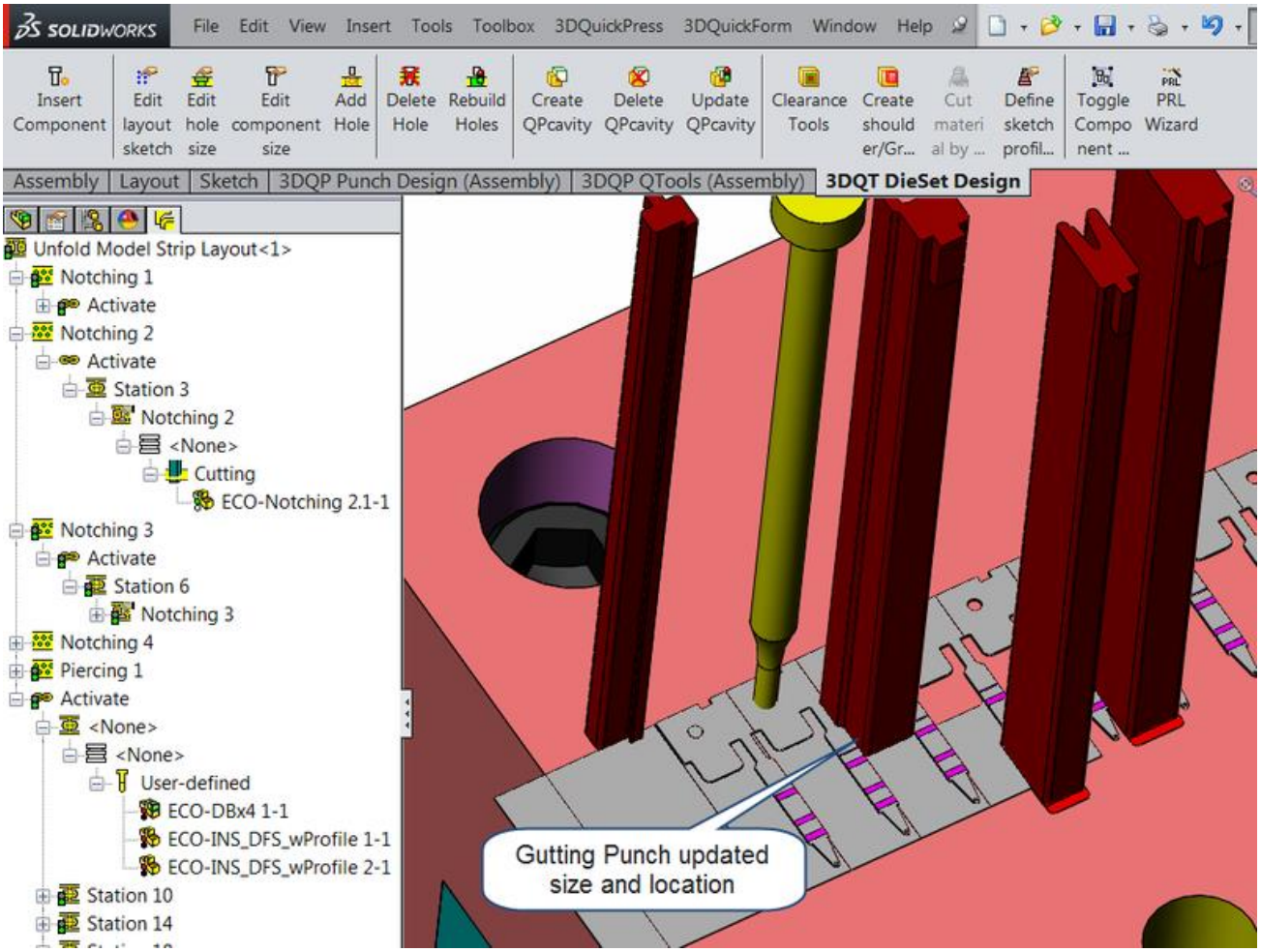


20. Repeat the process 18, 19 to update for ECO Changes to update the remaining Gutting punches.

21. *Bend 1:* Expand the feature tree to the ECO-Bend 1, right click on the feature and select *Rebuild Station Only* will start the rebuilding process, the *ECO Change* only required for the position to be updated.

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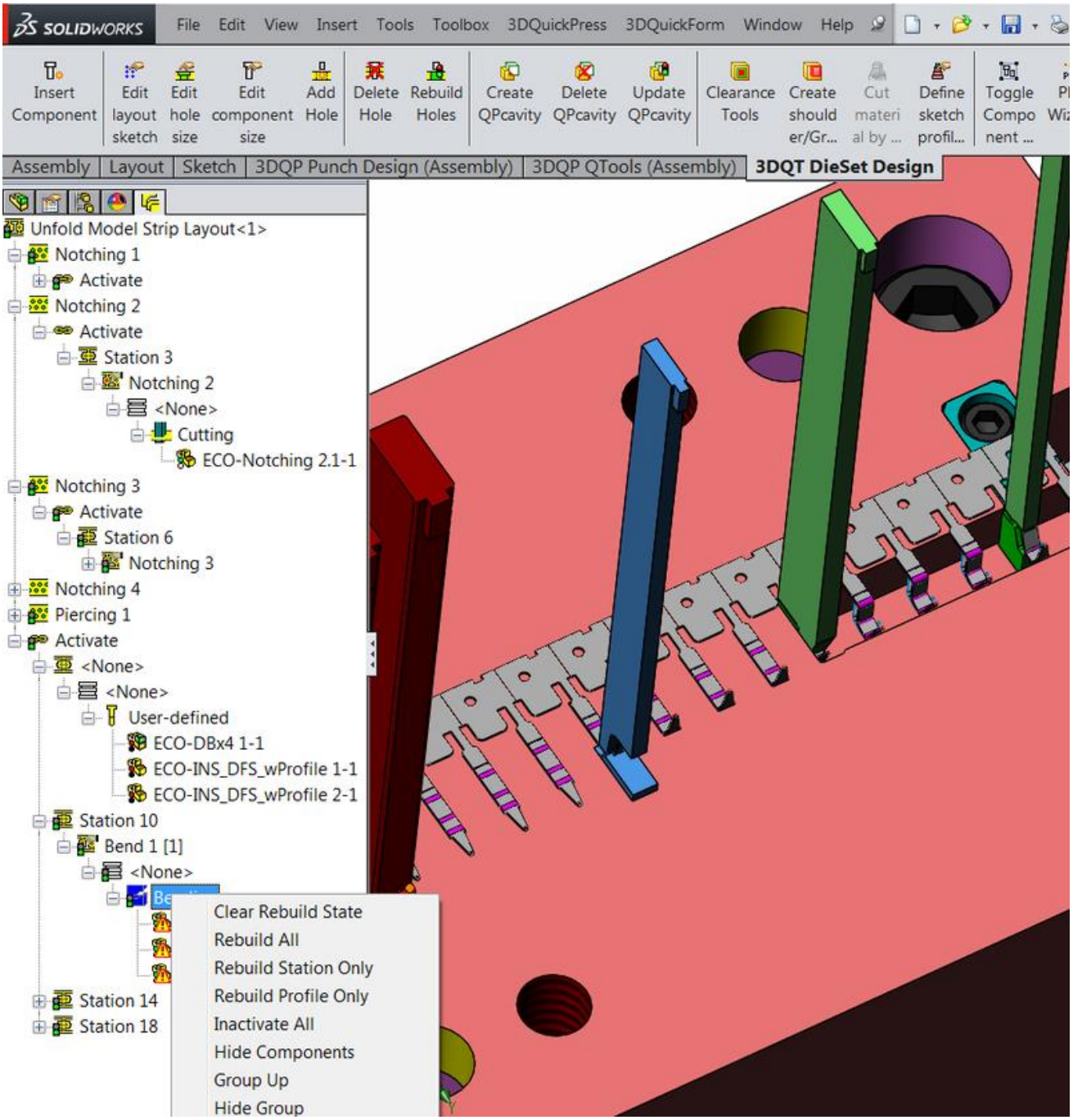


22. Repeat the process 21 to update the remaining ECO Changes to Bend Punches.

23. After completing the ECO Change the punch design cavities are updated after saving as shown.

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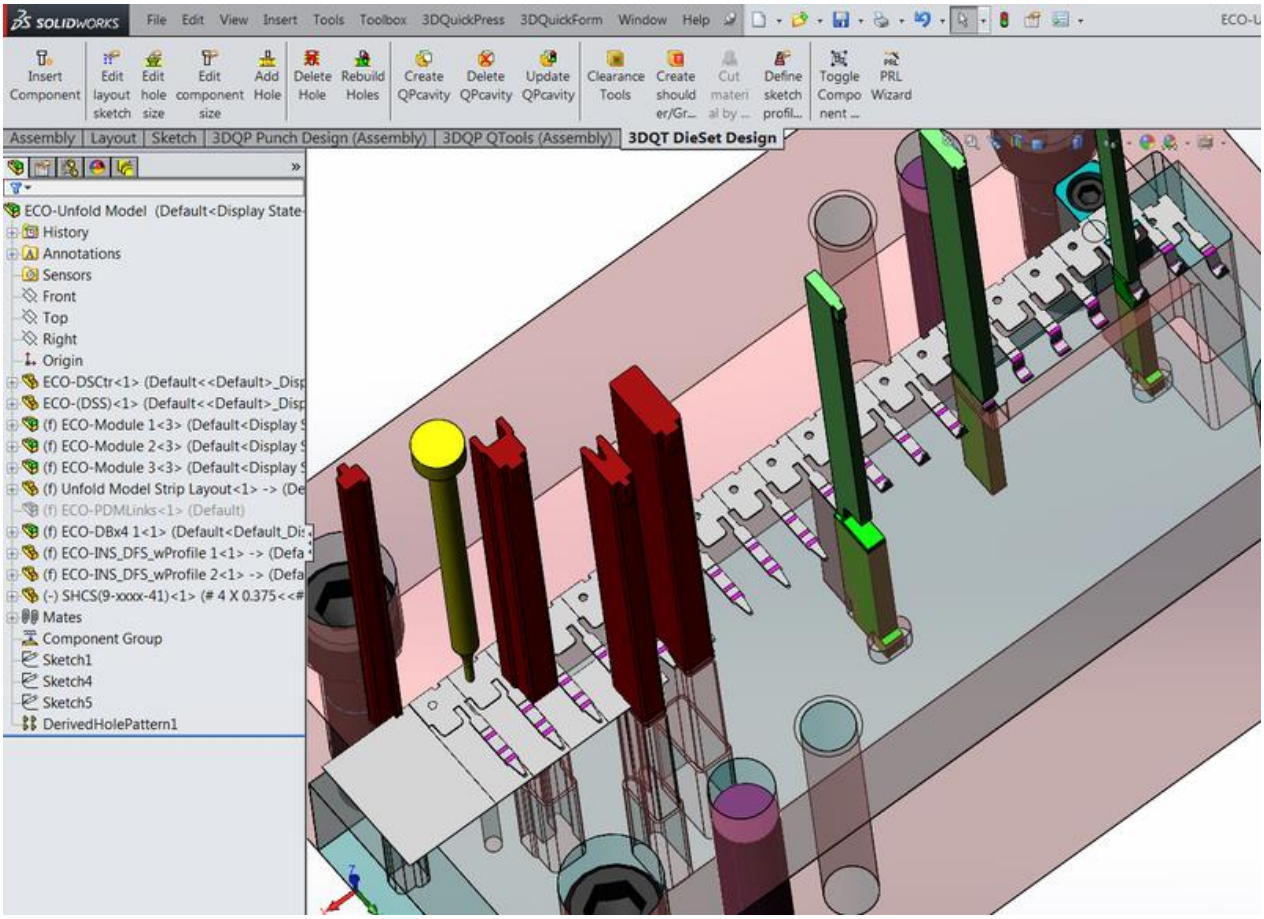


24. *ECO Changes* has always been challenging for CAD software's, using **3DQPress** inside *SolidWorks* makes *ECO Change* updates with ease saving the customer time and money.

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Posted by **Ronnie Flaugh** on June 18, 2014 at 02:14 PM
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# Technical Tips :
# 3DQuickPress on SOLIDWORKS (TM)

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